A Clinical Lecture

ON

THE SOMETIMES SUCCESSFUL TREATMENT OF CASES OF APPARENTLY INCURABLE BLINDNESS.

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MR. PRESIDENT AND GENTLEMEN,—It has been my good fortune on many occasions to restore sight to persons who were believed to be incurably blind, and as this end has been attained by means which are not usually adopted in the treatment of such cases it seems desirable in the interests of science and humanity that some mention both of cases and treatment should be placed upon record. Of course, it is not possible within the limits accorded to speakers on these occasions to do more than outline a few clinical histories, but sufficient will be said to show the vast importance of the subject and the marvellous results that may be now and then obtained. The cases comprise patients who have recovered after many years of apparently hopeless blindness, others who have suffered from, and under treatment have recovered from, the effects of neuro-retinitis, iritis with diffuse scleroderma, hyalitis, detached retina, atrophy of the optic disc, and the results of destructive inflammatory and degenerative changes. As to remedies outside the usual routine I should certainly place electricity, static, faradaic, and galvanic first; mercury, in large doses, either alone or in combination with other drugs second; derivatives, vascular, nervous, or both, third; and lastly, persevering treatment on these lines, with such operative procedures as may be indicated in each individual case, so long as there is the least chance of benefit or any eye left to be operated on. I propose to say a few words under each of these heads and to cite such cases as may serve to illustrate my meaning.

First, with regard to electricity, static, faradaic, and galvanic, I think that there can be no doubt that the profession is too much disposed to look askance at the employment of this remedy in the treatment of a variety of diseases; specially is this the case with regard to diseases of the eye; but the eye is really, from its watery constitution, its aqueous and vitreous humours, and consequent great conductivity admirably adapted for treatment of this kind; indeed, it is so easy to pass a current through the eyeballs along the optic nerves to the brain that one cannot but wonder why such obvious treatment should be neglected, while prominence is given to the administration of tonics and nerve stimulants which cannot possibly "touch the spot" as this remedy does and which have always failed to produce equally good results. I suppose this is due to the fact that those who are engaged in the treatment of diseases of the eye do not as a rule trouble themselves very much about electricity, while those in charge of the electrical departments of our great hospitals seldom or never see a case of eye disease; however that may be we must all acknowledge our great indebtedness to electricity, in the form of the Roentgen rays for instance, which, although it was discovered 40 years ago, has recently come upon us as a revelation, not only as an illuminant, but also as a therapeutic agent of the greatest value. Again, no one can fail to appreciate the charming results obtainable by electrolysis in angiomata, in inoperable tumours, adenoids, granular lids, and other abnormal growths. As a cautery, cataphoric agent, illuminant of internal cavities, destroyer of bacilli, heat and ozone producer, it is certainly without a rival, and the electro-magnet, both as a sideroscope and extractive agent, is indispensable in the treatment of accidents which are of daily occurrence. Again, no doubt can be entertained as to the value of the galvanic and faradaic currents in case of corneal ulcers and opacities, neuro-paralytic keratitis, and in cases of paralysis, both partial and complete, of the ocular, facial, and other muscles; all this goes without saying, but I go further still. I claim for this subtle agent a potent influence upon all living protoplasm, a restorative power for which there is no substitute, not only in cases of neuritis and degeneration the result of injury with its accompaniment of palsied muscles, but also in neuritis and degenerative changes such as accompany and follow upon attacks of influenza, diphtheria, diabetes, typhus, typhoid, rheumatic, and other fevers; as a stimulant, tonic, and catalytic agent in these cases it is undoubtedly of the greatest value, and it is our *dernier ressort* in cases of atrophy of the optic disc, neurasthenia, asthenopia, failure of brain power, and general nervous declension, such as is observed at the menopause in women, or as a result of advancing years or exhausting diseases, or the abuse of alcohol, lead, and tobacco in persons of both sexes; of course, one cannot always succeed, that were to ask too much, but succeed or half succeed or succeed not at all, you will, if you use this remedy, since hope is so potent a tonic, often do good in cases apparently beyond the reach of art, and now and then you will come across a case in which the effects are truly marvellous. Here is one. This patient, when 35 years of age, was sent to Nottingham in order that he might be taught a trade in the blind asylum; he had lost his sight in consequence of a severe attack of optic neuritis, and when I first saw him the discs were white and blurred and he could not tell night from day; he had been treated with the usual remedies without benefit and the case seemed hopeless. I nevertheless persuaded his friends to bring him to me daily, and sometimes twice a day, on which occasions I applied as powerful a galvanic current as could be borne. At first there was no change and I concluded that the case was hopeless; nevertheless, I determined to persevere a little longer and then improvement set in. First he saw the light, then a little more and a little more, day by day, until at last, to my great joy, I saw him one morning, with uncertain gait, stagger past my window without a guide. Sight continued to improve until he was able to resume his former occupation of coach painter and he can now (12 years later) read the newspaper in a bad light and his distant vision is perfect. This patient has been examined by eminent ophthalmologists and the traces of the disease from which he has suffered are still plainly visible. I have quite a number of cases which have been benefited by the use of the same remedy alone or in combination with other treatment. The list includes cases of hysteria, spinal amaurosis, amblyopia, amblyopia exanopsia, blindness or imperfect sight, the result of anæmia or simple atrophy of the disc, atrophy following on typhoid fever and other exhausting diseases, lead poisoning and the abuse of alcohol, tobacco, and some other poisons. The time at my disposal will not, however, permit of further details under this head and I therefore pass on to my next great remedy—mercury in large doses alone or in combination with other drugs. And here I must enter my protest against the very general impression that mercury *per se* (I mean in its non-corrosive forms) is a very dangerous poison; it is nothing of the kind, except in cases of idiosyncrasy, which one hardly ever sees, and in cases of defective elimination, which are rare; it is a comparatively harmless drug. Witness the workmen who were formerly, and I believe still are to some extent, engaged in silvering mirrors, and who were and are perforce more or less under the influence of mercury for years together. These men get high wages and so far as I can learn do not lead very careful lives, yet, although I have seen odd cases of neuritis, slight tremor, and occasional mild salivation among them, I have never been able to make out that they were as seriously affected by their occupation as they would have been if the very general impression as to the evil effects of this drug were correctly founded. I remember when I was a student a female out-patient at one of the London hospitals taking in one dose several ounces of mercurial ointment which had been prescribed in small quantities for external use; she was, of course, profusely salivated but was cured of her disease and seemed no worse afterwards. I believe the Arabian physicians, who were the first to use this remedy, prescribed it (principally in the form of ointment) in enormous doses, and we all know that in the old times a pint or more of saliva was exacted as a daily tribute from the inmates of lock hospitals, even when they were suffering only from non-syphilitic or pseudo-syphilitic affections. If I am told that I err in making these statements or that I

have been misinformed, I reply, be it so, it does not affect my argument in the least, for I have put this question to the test myself fully in the persons of numerous patients who have been taking mercury when indicated, under my direction, sometimes for years together. I still see now and then a lady patient from a distance who owes her salvation to mercury which she has been taking in the form of blue pills, sometimes six times daily (with intervals), for many years, and I have numerous patients who have taken it for long periods with no ill-effects whatever. Meanwhile the influence for good of this much-abused remedy, alone or in combination, is simply marvellous; here is a photograph of a young lady, 15 years of age, from a neighbouring town who has been taking mercury in large doses for *four* years; when I first saw her she was quite blind from iritis and diffuse scleroderma, or, in other words, parenchymatous keratitis. No iris or pupil could be seen, in fact, the eyes were simply opaque masses; she had been under treatment by eminent specialists and the case was considered hopeless; nevertheless, she has recovered perfectly, her eyes are as bright as those of anyone, she sees very well indeed to read and at distance, and her health has distinctly improved. Here are other cases that may be taken in proof of my position. The first of these was a peer who had always been short-sighted; he had been attacked long before I saw him with irido-choroiditis, followed by effusion into the vitreous humour, in fact, it was impossible to illuminate the fundus in either eye; he had been treated with mercury in small doses and other alteratives *secundum artem* by the most eminent men of the day and was ultimately declared incurable. "We can do nothing for you, my lord"—a sentence doubly shocking to one who had all else which wealth could bestow. As it was impossible to light up the interior of the eye an accurate diagnosis was out of the question, but I was informed that there was probably detachment of the retina in both eyes. I treated him with galvanism, large doses of mercury, massage, pilocarpine, and derivatives, with the result that within a month he had recovered most excellent sight, as good as he had ever enjoyed in his life—a blessing which he retained in full perfection until the day of his death many years later. I have had three cases almost identical with the one quoted in each of which the patients recovered, and many others differing only in small details; of the former, one was a distinguished journalist, another was a well-known merchant, and the third was an actress. The last-mentioned patient had, in spite of treatment in the metropolis and elsewhere, been blind for two years when I first saw her; in this as in the other cases it was impossible to light up the interior of the eye; nevertheless, under treatment similar to that just recorded the cloud disappeared, and although the nerve proved to be partially atrophied she has recovered sufficiently to be able to resume her former occupation upon the stage.

Mercury may be administered in the form of the blue pill, ointment, vapour and sub-conjunctival injections. For the last purpose I prefer the cyanide, the injection of which may be rendered quite painless by the addition to the solution of a small portion of acoine. It is frequently necessary to combine morphia with the pills, and pilocarpine is an immense help. This last may be given in half-grain doses internally or used as a hypodermic injection in doses of from one-tenth to one-quarter grain; salivation and profuse sudation are caused, and it is necessary to guard the sufferer against cold by raised temperature of the sleeping apartment and plenty of bed-clothes. Another adjunct is elaterine, which causes profuse watery evacuations and is specially useful, in doses of one-fortieth to one-tenth of a grain, when in addition to other troubles there is detachment of the retina.

Let us see now what can be done in the way of derivatives, vascular and nervous, or both, and among these I must give first place to blood-letting. I am afraid you will think me very old-fashioned, but I am certain that we do not bleed enough in the present day. When I was apprentice to a country practitioner in this neighbourhood we used to bleed patients at their own request, and for no particular reason, or because it was the spring or fall or change of life, or something of that kind; and I have now in my possession an old daybook or diary belonging to another practitioner on almost every page of which you may read, "Iter venesectio." A friend of mine formerly practising at Costock used to bleed himself whenever he felt unwell[1]. Both his arms were scarred with the wounds of repeated venesections. He was over 80 years of age, and when I spoke on the subject eagerly offered to perform the operation on his own person in my presence. We all know that in olden times the barber's pole betokened a willingness to bleed; indeed, in those days they thought no more of bleeding a customer than they did of shaving, hair-cutting, or selling liquor.

"Roam not from pole to pole,
But linger here,
Where you can be bled
And take your beer."

"Will you lose a little blood this morning, sir?" "No, thanks, I cannot spare the time." Now so violently are things changed that you cannot get bled if you wish to, not even if it would save your life. Some time ago I was taking a drive with a country practitioner and he asked me to see one of his patients with him. The patient in question was a full-blooded farmer about 50 years of age and weighing upwards of 16 stones. He sat bolt upright in a chair, the arms of which he grasped in desperate efforts to breathe. The pulse was laboured and he was as blue as a bilberry. "Bleed him," I whispered to my friend, "for God's sake, if you wish to save his life." He replied, "I have never bled a patient in my life." The farmer died the same night. A former patient of mine, of stout apoplectic build and subject to epistaxis (after a period of immunity from his usual loss), was seized with a violent pain in the head; he felt intuitively that he ought to be bled and called upon and besought three practitioners in succession to open a vein; they all refused and he returned home disconsolate, had a fit the same night, and died partially paralysed not very long afterwards. I hope you will agree with me that this is all wrong; the loss of a little blood, or a lot of blood for that matter, is of no great consequence, and if the patient is likely to be benefited he ought to have the chance of such benefit as blood-letting would afford; moreover, thick, treacly, diseased blood is better let out, and if the patient partakes freely of water it is diluted to his manifest advantage.

I remember a woman afflicted with delusions who murdered her three children and then cut her own throat, the last imperfectly. As the blood flowed her delusions vanished, the cloud lifted, and she at once realised and bitterly repented the awful crime which she had committed. Bleed early; *Obsta principiis* must be your motto, and let the blood flow until the pain, if there is any, has quite gone. When the eye only is affected it is difficult in the present day to persuade patients to submit to venesection, but I have applied 70 leeches to the temple in one case and have taken many ounces of blood with Herteloup's instrument from the same situation with the utmost benefit on several occasions. There are, however, other derivatives which act primarily on the nervous system, and which by diverting the *materies morbi* from the part affected often enable us to deal successfully with disease. These are sinapisms, blisters, setons, issues, ice-bags, hot-water bags, Turkish or lamp baths with hot pediluvia, intestinal derivatives, hot and cold aspersion, and the actual or electric cautery used so as to produce mere stimulation, counter-irritation, or destruction of tissue. Let me illustrate my meaning. When a man suffers from shock such as sometimes occurs on the introduction of the catheter, and this shock is so serious as to be followed by suppression of urine, he will die from uræmia and acute congestion if you cannot divert the attention of the nervous system from the kidneys to the skin. When a woman is seized with a rigor on the introduction of a foreign body into the uterus she will die from inhibition (as has happened in cases of criminal abortion) unless you can speedily distract the attention of the nervous system. When a delicate girl suffers from intense fright she is apt to develop palpitation and protruding eyeballs unless you can speedily distract the attention of the nervous system. See now what happens when the attention of the nervous system *is* distracted. When a man on the sea-shore afflicted with an urgent desire to micturate has stepped apart for that purpose the desire will instantly cease and remain in abeyance for hours if he finds himself surrounded by an advancing tide and his life is in danger; when an asthmatic on horseback is seized with a paroxysm of dyspnœa the attack is instantly arrested if his horse bolts and he finds it is as much as he can do to keep his seat; when a paraplegic afflicted with hysteria is roused by a cry of fire she will recover the use of her limbs and run down stairs, though she may have lain supine and helpless for months

or even years. Note, epileptics when on horseback do not have fits; and we all know how the mouth dries up and the back aches on intense emotion; how pain is annulled by religious ecstasy and how the toothache vanishes when we knock at the dentist's door.[1]

Gentlemen, when the beet-root sugar industry in Germany was threatened with extinction through the ravages of a parasite termed the eelworm Professor Kühn saved the situation by planting a decoy vegetable alongside the roots, and we can do precisely the same thing in surgery. If a vital organ is threatened with extinction or serious damage by inflammation we can save it by establishing another inflammation in a less vital organ near at hand; the attention of the nervous system is distracted; nature cannot support the two inflammations—as one waxes the other will wane, as one grows the other will wither; and this is true to a certain extent even of malignant growths. What more simple, then, what more rational, when sight is threatened by an intense or chronic inflammation than to save the eye by establishing an irritation or serous or purulent discharge in the nape, in the temple, the arm, or elsewhere. Let me remind you that Mr. Pott used to cure paraplegia and ataxy by setons, issues, and other counter-irritants placed in the cellular tissue alongside the spine, also that patients suffering from pyæmia were often saved by the formation of artificial abscesses in the cellular tissue of the buttock, spine, or leg. Shakespeare tells us "that one fire burns out another's burning, one pain is lessened by another's anguish," and if one principle in the practice of our profession is more certain than another it is that one pus-forming centre, one inflammatory zone, will dry up another. Nature, I repeat, cannot support the two and the way to kill one is to foster the other; this principle was more frequently acted upon and better understood by our predecessors than it is by ourselves, and I regret to see that some authors and more practitioners scout the idea of counter-irritants and derivatives, and often refuse to employ one of the most useful remedies and one of the most potent means for good that we possess.

I now come to my fourth and last contention, which is simply this, that if you will treat patients on these lines—that is, if you will distract the attention of the nervous system by baths, derivatives, and counter-irritants, cut off the supplies of *materies morbi*, sugar, uric acid, indican, &c., by diet and depletion, stamp out the specific element of the disease, gout, rheumatism, syphilis, or what not, by specific treatment—and then resort to such operative measures as may be indicated in each individual case, such as the formation of an artificial pupil, the removal of inflammatory products, the extraction of the lens itself if necessary, and the cutting out of capsular débris if needful, you will restore sight in many cases where such a result seemed impossible. Here is one. The patient, resident in London, married, and 27 years of age, was seized a decade ago with irido-choroiditis in both eyes. Notwithstanding treatment the attacks recurred again and again, until four years ago the iris in both eyes was bound down and the pupils were blocked with lymph. She was treated by the most eminent ophthalmic surgeons and submitted to four operations, two in each eye, apparently without benefit, and as blindness was complete, the pain very great, and the case presumably hopeless, it was decided to excise the left eye; this operation the patient at the last moment refused and then came to me. When I first saw her inflammation was rampant in both eyes, and I therefore treated her with depletion issues and large doses of mercury—in fact, she was profusely salivated again and again much to her temporary discomfort but with the utmost benefit to her eyes; then, when all inflammatory troubles had ceased, when I had as I believed stamped out the essential element of the disease, I ventured to remove a mass of lymph and degenerate iris from the right eye, only to find, as so often happens in these cases, that the lens was quite opaque. I therefore performed the operation of extraction for cataract *secundum artem* upwards, leaving a clear pupil which I hoped would suffice for vision; but no, it became blocked with lymph and closed almost immediately; so I made another pupil only to be disappointed again by closure, and then a third, which last proved successful, and this lady, who had been blind for four years, has now excellent vision. Here is a letter from her in which she describes how much she enjoyed the sights in the crowd on the recent home-coming of the City Imperial Volunteers.

You will say, What became of the left eye, the one condemned to excision? Well, this eye was subjected to precisely the same series of operations with (incredible as it may seem) exactly the same result, in fact, she recovered excellent sight with it and writes, "I can now see very well with my left eye and my right improves daily."[2]

Here is another case which shows how things "out of hope may be compassed oft by venturing." This patient was in his twentieth year attacked with irido-choroiditis for which he was treated for three years as an out-patient and as an in-patient at one of our largest ophthalmic hospitals. Ultimately the retina became detached in both eyes and then cataract, secondary cataract, formed also in both eyes, so that when I first saw him the pupils were blocked with milk-white masses and he could barely tell night from day. I treated him with galvanism, mercurials, sudation and derivatives, and then, when his improved condition warranted the procedure, extracted the lens in each eye. He has now, as you see, very good-looking eyes and very useful vision, being able to earn his living as a journeyman baker.

Here is another very similar case occurring in a patient who has already been presented to the notice of the members of this society. This patient, who had been treated in an ophthalmic hospital, was sent to me by the late Dr. Metcalf of Lancaster. She was 22 years of age, had been blind for four years, and had during that period consulted several ophthalmic surgeons, with the result that she was declared incurable and was advised to enter an asylum for the blind without delay. "Is it any use going elsewhere for advice?" she asked. "Not a bit; no one can do you any good." When I first saw her both pupils were contracted, adherent to the capsule of the lens, and blocked by dense calcareous masses, while the eyes were so soft that they collapsed under the finger. I treated her with constitutional remedies *secundum artem*, with the continuous galvanic current and subconjunctival injections, and when her improved condition warranted the procedure I extracted the calcareous masses from each eye, with the result that she recovered excellent sight both for reading and distance; in fact, I have letters from her as well written as any I could write myself.

These cases, if neglected, overlooked, or deemed incurable, will often lead to many years of deprivation of sight, or even to life-long blindness, a catastrophe which may be averted by judicious treatment. Here are two or three cases which may be taken as proof of this assertion. The first is that of a lady resident in one of the northern counties who came to Nottingham to consult me in her sixtieth year. She had been blind for upwards of 30 years, during which time she had borne three children, not one of whom she had seen. It appeared that when about 30 years of age this lady, who was in affluent circumstances, was seized with an attack of irido-choroiditis in both eyes, which, although subdued by treatment, left considerable impairment of vision. This attack was followed by others, the sight deteriorated more and more, until at last she could not see to go about. At this time she was taken abroad to consult an eminent specialist and she remained on the continent for some months. Varying treatment was subsequently adopted both at home and abroad until she was brought to me. At that time the pupils were reduced to mere points and were blocked by dense masses of lymph; suffice it to say that I extracted the lens and operated upon her repeatedly until I at last succeeded in making an artificial pupil in the left eye, through which she was enabled to read, write an excellent hand, and walk abroad unassisted.

Here is another case that was brought to me by the Rev. Mr. Lloyd of Draycott, in this neighbourhood. This gentleman had been blind for upwards of 40 years and was habitually led about by an attendant. Both pupils were closed and blocked by dense calcareous masses which I managed to remove, and then by making an artificial pupil succeeded in restoring vision in the right eye. This patient recovered excellent sight, and was enabled to read and write and to go about with great facility. Another gentleman, the son of a Member of Parliament, who had been blind for upwards of 30 years and who had been habitually led about, also recovered under similar operative treatment sufficiently to travel as a "commercial," to see

[1] Witness King David, the orator's water bottle, the Indian ordeal for theft, the Flagellants, the Crucifixionists, and that extraordinary sect who submit to be buried alive.

[2] Owing to an accidental injury some months later this eye suffered a relapse which necessitated a further operation, with what result I cannot at present say.

the time by his watch, and to go about unassisted. And I have quite recently (that is, within the last six months) had two similar cases—one recovering by operation excellent sight after a blindness of upwards of 37 years in the right eye, the other being very defective, and another from a similar condition, also by operation, which in one eye had existed upwards of 20 years. I perceive, however, that time will not permit of further details on this occasion and I therefore conclude.

Gentlemen, in dealing with disease you must remove the cause, strengthen the vital resistance, and treat symptoms as they arise, taking special care to do no harm. As Aristotle has it, "Τό δε πρώτον τό μή βλάπτειν." Indeed, no amount of success, however brilliant in certain cases, can compensate for failure and loss of sight in others if such failure and loss of sight is the result of the operator's overweening confidence, neglect of proper precautions, or unnecessary interference. You will note that I do not ask you to forsake the beaten path, to essay an impossible task, or to take a leap in the dark. I merely seek your adoption of plain common-sense principles, which everyone can understand, which have the sanction of experience and which yield important results. It has been well said that "to restore sight to the blind will ever be considered one of the grandest of human achievements." To restore sight to persons hitherto considered incurable is perhaps grander still; but best of all, it seems to me, is to impart the secret to others. It is with that object I am here to-night, that I have ventured to address you, and to place at your disposal arms of precision that will give you the mastery over disease.

ON TWO CASES BEARING UPON THE QUESTION OF THE LIMITATIONS OF ENTERECTOMY.[1]

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THE two cases how to be recorded appear to have some value as, when taken with others, assisting us to form conclusions in regard to the limitations of enterectomy which can only be settled by experience. The first bears upon the question whether this delicate and difficult operation, which demands a very full measure of reparative power on the part of the patient, ought to be undertaken at all in the presence of marked glycosuria. This condition is well known to exercise in various ways a most depressing influence upon all the vital processes and might be assumed for that reason (perhaps too readily) absolutely to contra-indicate an operation, such as the removal of part of the bowel and end-to-end anastomosis of the same. The second, in which five and a half feet of small intestine were removed for gangrene in a woman, aged 76 years, raises the question whether advanced age is of itself a barrier to the removal of large tracts of the intestinal canal with end-to-end anastomosis. It also gives some hints as to the extent to which such excision may be carried and the effects on assimilation of removal of large portions of the small bowel. Both cases having been followed by complete recovery we are in a better position now to argue from experience than before. The first case was as follows.

CASE 1.—A woman, aged 58 years, was admitted into University College Hospital on Oct. 3rd, 1900, under the care of Dr. G. V. Poore. She complained at this time of great pain above the umbilicus and obstinate constipation. She was known to suffer from diabetes and later was found to have 6·6 per cent. of sugar in the urine. The pain had begun eight months ago and the patient was obliged to remain in bed from the middle of May to the end of June, 1900. After this she was advised by her medical attendant, Dr. Baldwin, to go to the seaside for three weeks. Here she improved on a diet chiefly of fish. After returning home the pain was very intense, especially after solid food. She was usually sick from half an hour to an hour after food, but had no hæmatemesis except on one occasion three weeks before her admission into the hospital. Three weeks before she could not keep down even soda-water and milk. She had always been constipated and stated that drugs had no effect upon this condition. Three weeks before admission she had "coffee-ground" vomiting. Her aspect was that of a fairly healthy woman, and in spite of having lost 2 st. 6 lb. in weight during the last six months she looked fairly nourished. She had no appetite. The abdomen on inspection looked like that of a healthy woman who had borne many children (10). There was tenderness above and to the left of the umbilicus, and here an oblong tumour could be felt. It lay across the abdomen and was sausage-shaped and moderately firm and moveable; otherwise the abdominal contents showed nothing abnormal. The urine was acid, its specific gravity was 1040, and it contained no albumin, but it gave the reaction of sugar. When Dr. Poore kindly asked me to see the patient with him we agreed to distend the stomach with air and then after evacuating it to inflate the colon. When the stomach was distended the tumour was a little less evident but was otherwise unaltered. On distending the colon, however, the tumour was pushed to the right iliac fossa and reduced in size. From this we argued that it was probably seated in the transverse colon and was associated with more or less intussusception of a ring-like growth of carcinoma into the distal portion of the bowel. The patient being in a fair condition except for the glycosuria it was determined to attempt removal of the growth. The preparation for operation consisted in clearing out the descending and transverse colon by copious enemata, drugs having failed. Codeine phosphate in one grain doses was given three times daily hypodermically for the diabetes, and 10 grains of carbonate of bismuth three times a day as an intestinal antiseptic.

The abdomen was opened on Oct. 25th, 1900, in the middle line by a three-inch incision, branched below to include the navel, which was excised. The mass was found to the right of this opening, and on being lifted out with ease was seen to be an annular mass of carcinoma, producing a very tight stricture of the colon. The bowel above contained hard scybala and was much hypertrophied; below the mass it was empty, dilated, and thin-walled. There did not appear to be any glandular infection, but there were a considerable number of adhesions with portions of the omentum round the growth. The latter was now separated from the omentum after ligature in several pieces. The bowel was then closed by several pairs of Doyen's forceps above and below the growth, and the middle portion of the colon was cut clean out with scissors, which were also employed to cut across the mesocolon about one and a half inches from the portion removed, in the centre of which was the annular cancerous stricture. The portion of colon removed measured, in the contracted condition, four and a half inches, about one inch of this being taken up by the growth. The ends of the divided bowel were now brought together after being cleansed and were sutured end to end in the usual manner with fine silk stitches in two rows, a deep row and a superficial row. Then the gap in the mesocolon was closed by a continuous silk suture. When the clamps were now removed the continuity of the bowel appeared to be satisfactory, and the abdominal wound was united by silk stitches passing through all the structures of the edges and without any drainage.

The patient bore the difficult and prolonged operation particularly well and soon recovered from the anæsthetic. She expressed herself as at last free from the severe pain from which she had suffered for months. The temperature remained below 100° F. for the first nine days, during which she steadily improved. There was no vomiting except a mouthful soon after the operation. Feeding by the rectum was kept up for four days and small quantities of fluid were given by the mouth from the second day onwards. Morphia was given, at first two or three times daily, but on the third day I began to administer codeine phosphate in doses of one grain hypodermically three times daily on account of the sugar in the urine, which was shown on the fourth day to amount to 6·6 per cent. From this day it steadily declined in amount until on the ninth day it was only 2 per cent. It diminished now still more rapidly when the codeine in the same amount was given by the mouth until the thirteenth day, when it disappeared altogether, only to reappear once to the amount of 2·8 per cent. on the seventeenth day, when it was found that the patient had surreptitiously eaten some sugar

[1] A paper read before the Royal Medical and Chirurgical Society on Feb. 26th, 1901.

and also grapes. After this sugar was either totally absent or only found in a mere trace until the end of convalescence. For the first ten days the original gauze dressings were not removed, as the temperature had remained practically normal and the patient's abdomen appeared perfectly quiet except for some flatulence. On the tenth day, when the dressings were taken off for the first time, it was evident that some suppuration had taken place. The stitches were cutting and the edges were somewhat swollen and red; a few bubbles of gas escaped also with the pus from the upper stitch holes. The temperature, however, was only 99° and the local and general condition otherwise was very good. The wound was supported by American rubber plaster. This day an oil enema was given with only a slight result, but much flatus was passed subsequently. The next morning at the dressing it was quite clear that a small amount of fæces was escaping from the upper stitch holes and this increased for a few days and then began to lessen. After the first two stools on the nineteenth day after operation, which were very copious, the discharge of fæces from the fistula became insignificant until on the twenty-seventh day it ceased altogether for a week. On the thirty-second day there was some swelling and redness at the lower end of the wound, and the next day a slough was seen protruding, which on being pulled on was of about the size of the little finger, and was seen clearly to consist of a piece of omentum or mesentery with one or two silk stitches attached. There had been a smaller slough of the same kind extracted some days earlier, but no record was made of it. All this time the patient's condition was excellent. The bowels acted regularly with or without enemata, and abundant liquid and solid food was taken. Two days after the discharge of the slough above mentioned there was a trace of thin fæces on the dressing, but the wound healed rapidly, and was almost definitely closed on the day the patient left hospital, only a tiny point of granulation remaining. This was on Jan. 13th, 1901.

The portion of colon removed is four and a half inches long, and shows the hypertrophy of the afferent end and the dilatation and thinning of the lower. In the middle lies the ring of carcinoma, which only admitted the passage of the tip of the little finger before it was slit up. Under the microscope the growth was seen to be an ordinary columnar epithelioma.

The chief interest of this case appears to me to centre round the fact that this patient had for years been a diabetic, and at the time of the operation was getting rid of 6·6 per cent. of sugar in her urine, and was growing thinner. Hitherto such a state of things has generally been held to contra-indicate most severe abdominal operations. But surgery has altered much with the introduction of aseptic conditions, and it is possible that we may consequently have to revise our notions still further in regard to the possibilities of repair in diabetic patients, and with them our practice. Such cases as the foregoing help us somewhat in forming conclusions on this point. Personally, I can only remember three cases in which I have been called upon to do abdominal operations on diabetic patients. The first was one of carcinoma of the rectum with complete obstruction, for which colotomy was necessary. Here there was no repair in the wound and the patient died comatose. The next was a radical cure of an umbilical hernia where the sugar was overlooked before operation. Here, as I expected when the sugar was found, the day after the repair was had and the wound broke down and only very slowly healed, and although the patient appeared well generally throughout I was very anxious until he left the hospital in good health. In the present case I was, to some extent, encouraged by the last as showing that union of the abdominal wall, at all events, could take place in a diabetic. But there are very few cases, so far as I know, in which enterectomies have been done in this condition, and there was little evidence to show how repair of the gut would take place in a diabetic patient. It appeared, however, probable that if other tissues can heal in the presence of sugar in the blood, the peritoneum, if kept clean, could, with its wonderful reparative power, do so too. I confess I expected more or less of a fæcal fistula in this case. This is very common in enterectomies of the large intestine under ordinary conditions and would be more likely where sugar was present. But in spite of this it appeared proper to face the risks of operation in view of the almost complete obstruction and the inevitable death which must soon follow if nothing was done. The slight sloughing of the omentum and mesentery in this case is new to me. I have tied these structures in many operations, but until now have never seen any evidence of necrosis in them. This, I think, can be fairly ascribed to the lowering of their vitality due to the presence of sugar in the blood.

CASE 2.—The second case was that of a feeble old woman, aged 76 years, who was admitted into University College Hospital on Jan. 10th, 1901. She had always enjoyed good health, but in 1870 had undergone ovariotomy. She had had no children. For two years she had had a large ventral hernia in the ovariotomy scar. On Jan. 8th and 9th she had not felt well and complained of some pain in the abdomen, but she was not sick. At 10 A.M. on the 10th she was seized with severe pain in the abdomen and vomited the contents of the stomach slightly bile-stained. The hernial tumour was tender and more swollen than usual. There was no more sickness and no motion or flatus was passed. At 11.20 on that day she was seen by Dr. Rainsford Gill, of King Henry's-road, who states in a letter that he was called to see her for what appeared to be a fainting attack. She then appeared in but little distress. Two hours later she had vomited and had another attack of faintness. The vomited matter contained masses of undigested bacon. He again saw her in about an hour, and she "then complained *only* of epigastric pain—*none* in the lump, which she mentioned was as usual. I had," wrote Dr. Gill, "my doubts and sent her down to hospital; the doubt only occurring because manipulation seemed to increase the epigastric pain and I thought it must mean involved omentum." The patient's state on admission was described as follows: "Feeble woman, with intermittent pulse of 108; face pinched; tongue moist; condition, but for age, good. There is a lobulated median ventral hernia five inches in diameter, extending from umbilicus to pubes. The front of the sac has the scar of an ovariotomy in it. The tumour is tense, dull, not tender, and shows no impulse on coughing. There is definite fluctuation and thrill across it." (I should like to say here that the success of the operation was entirely due to this prompt action on the part of Dr. Gill. These cases are hopeless after a certain moment of septic absorption has been reached, and this he forestalled.) When I first saw the patient, at 10 P.M., and examined the mass under an anæsthetic, some of the contents of the sac returned easily and at once and the whole pelvis was found to be full of very hard masses, discovered later, on opening the abdomen, to be fibroids of the uterus probably calcified.

I immediately opened the abdomen through the old scar and about a pint of dirty blood-stained fluid with a fishy odour gushed out. A loop of blackened small intestine was now seen of about three feet in length, strangulated through the omentum. The gut had not entirely lost its lustre, but was very foul and was distended tightly with dark blood-stained fluid. The peritoneum was not cracked, but hæmorrhages existed beneath it in several places, and a few of the subperitoneal venules were thrombosed. The extremely foul and fishy odour of the gut and fluid around it determined me to remove it, as its recovery seemed hopeless. I therefore cut away five and a half feet of the bowel and anastomosed end to end as rapidly as possible. The time taken for this part of the operation was 44 minutes, the whole operation to the last stitch requiring 63 minutes. During the operation, which was well borne, 12 ounces of normal saline solution were slowly injected subcutaneously. The whole of the lower part of the abdomen was filled with very hard fibroids of the uterus, which reduced the amount of space for working very much. The surgical registrar's report next morning on the portion of gut removed was as follows: "The parts removed were five and a half feet of small intestine. Three inches from the lower end is the seat of the distal constriction. The gut at this point suddenly becomes intensely congested and hæmorrhagic, of a purple-black colour, and its walls are thickened with intense œdema. At the time of operation there was a definite groove at this spot, which has now disappeared after lying in weak spirit for 12 hours. On tracing the gut upwards from this point the first three feet are all intensely congested, thickened, and œdematous, but the changes become less marked above, and the upper two feet, though now only pale and œdematous, were congested at the time of operation. There is no groove or sudden change in the pathological appearances to mark the seat of any constriction of the proximal loop of gut, the congestion and œdema becoming gradually less when followed up the coil. On

slitting up the gut the mucous membrane of the lowest three feet has a deep purple-black colour, and the valvulæ conniventes are so swollen, discoloured, and pulpy-looking that it is difficult to say whether any ulceration exists. After lying some days in weak formalin the parts merely congested became paler and revealed three large patches in the last 18 inches of gut, where the mucosa was hæmorrhagic, partly gangrenous, and superficially eroded. Each patch involved the whole circumference for about three inches, and the lowest one, where the changes were most marked, had a definite, abrupt linear lower border marking the seat of the distal constriction. In the next foot of gut above there were two similar but smaller patches of mucous hæmorrhage and erosion, only involving a part of the circumference of the bowel for about one inch by half an inch."

During the night of Jan. 11th the patient had an enema of hot saline solution with half an ounce of brandy, followed in two hours by a nutrient suppository. She also had one ounce of albumin water every two hours. There was only slight sickness once. The temperature this morning was 100°F.; the pulse was 120, intermitting one in eight; and the respirations were 30. There was slight distension, but no pain or tenderness, and the patient passed urine without the catheter. Her colour was good. There was no flatus. The treatment consisted in nutrient suppositories every four hours, with saline injections per rectum every alternate four hours. She also had one ounce of albumin water with one drachm of brandy every two hours by the mouth. She also took 20 grains of carbonate of bismuth and two minims of solution of strychnia. On this day the temperature rose to 101° but soon fell to below 100°. Fearing trouble in the lungs in an old person I ordered that she should at once be put in a sitting position and kept so throughout, except for a few hours when she was to sleep in the horizontal position.

There is little now to record except uninterrupted convalescence. The food was rapidly increased until soon the patient was taking nine ounces of brandy, 24 ounces of albumin water, eight ounces of Benger's food, and, later, eggs, pounded meat, and fish. My chief anxiety was about the bowels. These acted twice on the fourth day, three times on the fifth day, four times on the sixth day, and five times on the seventh day, which led me to fear septic catarrhal enteritis. This is not to be wondered at when we remember the state of the bowel above the constriction. The diarrhœa was checked, however, by a few doses of solution of opium (five minims) and there was no further trouble until the twelfth day, when there was another looseness of the bowels. There was just a trace of bronchitis, but never enough to cause alarm, and it was kept under by rubbing the back, by adopting the sitting position, and by wool-packing. In order the better to combat all lung trouble I thought it well to let the patient sit up in an arm-chair on the sixth day by the fire for some time. This seemed to produce a good effect. The wound was not dressed until the tenth day, when primary union was found. A strip of collodion gauze was put over the wound and the whole abdomen was supported with rubber plaster.

Returning now to the first of these two cases I need hardly remind this society that important papers have been published comparatively recently in its "Transactions" tending to show that under the improved conditions of antiseptic surgery the prospect of operations for diabetic gangrene are now by no means so gloomy as formerly. But it must not be forgotten that only 35 years ago the Surgical Society of Paris debated the question whether any operations at all ought to be performed on diabetic patients and came to the general conclusion that only those conditions which without an operation would inevitably end in death should be dealt with—as, for instance, by tracheotomy or herniotomy; and many present on that occasion still maintained that no operation, even the smallest, should be done in the presence of glycosuria. But though it has been since shown that amputations for diabetic gangrene have been performed with a fair measure of success we have still but little evidence as to how operations upon the intestines are borne in the presence of glycosuria. This case, then, appears to offer some encouragement.

As far as we know from recent investigation the way in which sugar in the blood and tissues operates in producing that lowering of vitality which finds its grosser expression in gangrene of the extremities and its lesser in more limited necrotic changes in the lungs, intestinal and renal epithelium, is somewhat as follows. The derivatives of altered tissue change due to glycosuria, such as acetone, acetic, lactic, β-oxybutyric, and oxalic acids, injure the tissues and make them more vulnerable to infection. They are the source[2] of occasional necroses of internal organs, of premature angiosclerosis, and, in combination with increased destruction of albumin and diminished repair, are the origin of precocious senility. All recent authors have found extensive arterial disease in diabetes. Degenerative neuritis is a secondary result of this defective blood-supply to the nervous system due to angiosclerosis.

There are, then, two forms of extreme lowering of vitality due to glycosuria, often producing necrosis—(1) that due to angiosclerosis and thrombosis, and (2) that due to inflammatory processes started by virulent forms of bacteria in weakened tissues. Further, it has been shown that the amount of sugar which is found in the blood and tissues of diabetic patients corresponds pretty nearly with the amount which is found by bacteriologists to be most favourable to the growth of pathogenic organisms on cultivation media. Dr. F. W. Pavy pointed out long ago that the blood of diabetic patients contains about on an average from 0·6 per cent. to 0·5 per cent. of sugar, and many experimenters have found that this is the best percentage of sugar for agar-agar or bouillon if the organisms are to grow at their very best, while a higher percentage either inhibits their growth or reduces their virulence. It would follow from this that, after all, the chief danger to wounds in diabetes is sepsis, and that with the avoidance of this even delicate reparative processes, such as the soldering up of intestinal wounds, may be hoped for. The other forms of lowered vitality would remain, of course, as well as that due to chloroform narcosis, and have to be faced. But we can avoid violence to the tissues by delicate manipulation, and can now spare them the further devitalising effects of strong chemical germicides.

The only reference to changes in the intestines found in cases of diabetes made by Dr. R. Saundby, in Allbutt's "System of Medicine," is as follows: "These [the intestines] share in the congestion and catarrh which are found in the stomach; hæmorrhages may be present in the duodenum. The large intestine is generally filled with hardened fæces and occasionally shows dysenteric inflammation or desquamation of its epithelial lining." Again, in his "Summary" Dr. Saundby says: "Diabetes is a disease which has so profound an influence upon the general nutrition of the body that it tends to produce structural alterations in the various organs which are for the most part of a secondary and degenerative character."

Out of the many features of interest in Case 2, that of the removal of five and a half feet of small intestine in a feeble old woman, 76 years of age, for gangrene, I will only specially allude here to three. First, that the advanced age appeared to be no barrier to the most perfect repair, for everything apparently healed as it might have done in a patient 50 years younger. Next, that so far we have no evidence that in her case the withdrawal of so large a part of the secreting surface of the small intestine has had any injurious effect upon the system. Digestion seems now very good and the motions appear normal. Finally, this case suggests that in some cases of internal strangulation with damaged, paralysed bowel, distended with intensely septic products, but not actually gangrenous, it might on the whole involve less risk to cut away all the damaged portion with its contents than to return it to the abdomen with or without evacuation after its release from strangulation. How often have we seen the patients in such cases die from intestinal sepsis or peritonitis many days after the release of a constriction and with a healed wound, the bowel being found after death still flaccid and discoloured, though in no way perforated. Some undoubtedly recover, but often after violent enteritis, and some only to fall victims to other forms of obstruction set up by adhesions.

I may add that just before the first of these cases was admitted to the wards I had to resect in another case 37 inches of small intestine which was all matted together and kinked, causing almost fatal obstruction. In this case I had operated on a strangulated femoral hernia four months before. And though the discoloured loop was far short of gangrene and the usual wound healed perfectly by first intention, admitting of the patient leaving hospital on the sixteenth day, two very severe attacks of acute obstruction, each nearly fatal, followed with intervals of about a month.

[2] Grossman: Ueber Gangräne bei Diabetes Mellitus, p. 127.

When in October I opened the abdomen to see the cause the knuckle of intestine which had been in the hernia was found so sharply kinked and held down by matting adhesions that it was a marvel that the patient had so long survived. Fortunately, the removal of three feet one inch of the damaged intestine with end-to-end union was followed by complete relief, but I now think it would have been better to have done it in the first operation.

APPENDIX.

The consideration of the second of the above cases could hardly be regarded as complete without some references to those other extensive resections of the intestine which have been published up to the present.

Taking one metre (39·5 inches) as a minimum limit I have been able, with the help of various publications (see below), to collect 27 successful resections of intestine exclusive of my own. These range themselves as follows: between one and two metres, 20 cases; between two and three metres, five cases; and between three and four metres, two cases. The amount in this list removed actually ranged between 100 centimetres (3 feet 3½ inches) and 330 centimetres, or 10 feet ½ inch. This largest amount was removed from a boy, aged eight years, whose condition a year later showed no evidence that the loss of so much of his small intestine had unfavourably affected his health. Of the others it can only be said that those who had lost under one and a half metres (4 feet 10½ inches) appeared to suffer nothing permanently from the operation. Of the seven cases, including my own case, in which between one and a half and two metres had been sacrificed, two showed some disturbance of the assimilative process. My own patient, the old woman, aged 76 years (66 inches = 165 centimetres), has had on three occasions slight diarrhœa to the extent of one or two loose stools, but otherwise appears to be in the best of health and to have put on flesh. In the other (Schlatter's), where 192 centimetres, or 6 feet 4 inches, were removed for strangulation in a healthy man, aged 23 years, the patient was soon able to take any kind of food and increased largely in weight while in hospital. A year after he was found to have lost three kilogrammes and to be unable to undergo prolonged physical exertion. In the five cases in which between two and three metres had been removed diarrhœa is noted in three when the diet was not regulated; otherwise the patients were well. In the fourth case a man, aged 22 years, from whom 202 centimetres of small intestine were removed, there is no record of any intestinal fault; the other was quite well until death two and a half years later. In the two cases in which respectively 310 centimetres and 330 centimetres of small intestine were resected the condition of the patients at the end of a year showed no loss of weight, but in the first, a man, aged 60 years, an analysis of the excreta showed that assimilation was not perfect but was made up for by the amount taken. In only two of all these cases was a careful analysis made of the excreta after the operation. In Fantino's case (310 centimetres) assimilation was obviously below normal. This was indicated by the rapid appearance in the stools of aliments which could be recognised; and besides, the bowels acted more frequently than normal. Moreover, a chemical analysis showed that the motions were richer in nitrogen, fats, and water than normal, but in spite of this the weight increased. In Schlatter's case practically the same results were arrived at by an analysis of the excreta.

From all this it would appear that about two metres of small intestine, say six feet, may be removed without any serious damage to the subsequent assimilative powers. But I think no one can study these cases without arriving at the conclusion that in this length we have probably arrived nearly at the limit of safe resection of the small intestine. And I feel glad that I had some recollection of having read some of these conclusions somewhere when I was suddenly called at night to operate on this case. It led me to roughly measure what I was about to excise by passing it a foot at a time through my fingers before fixing on the spots to divide the bowel. I remembered, I believe, Senn's conclusion that not more than one-third of the whole of the small gut should be taken away; and though the upper part of the bowel at the spot selected for division was still œdematous and hæmorrhagic I determined to keep within these bounds. It is true that Senn's conclusions were based upon his experiments upon dogs, which might be misleading. It is also true, as I have since read, that Trzebecki's experiments on dogs led him to believe that one-half of the small intestine might be safely excised in man, and that Monari, after a series of similar experiments, arrived at the result that dogs will bear the loss of seven-eighths of their small intestine, and that probably the human being might be deprived safely of two-thirds. It is also true that a boy eight years old has actually lived and grown strong after forfeiting 10 feet 10 inches of small intestine. But the danger of arguing from experiments on dogs or from one or two cases affecting the human subject is clearly suggested by some of these cases, which appear to come perilously near the justifiable limit. And the great value of accurate clinical records is thereby to my mind abundantly shown where abstruse physiological problems are involved. It seems probable, from experiment and observation, that in younger patients who survive the operation a compensatory hypertrophy may take place in the small bowel left behind, which may make up for the loss. It seems also to be suggested that the resection is better tolerated the lower down the intestinal tract it is done.

CASES OF RESECTION OF BOWEL TO THE EXTENT OF MORE THAN ONE METRE WHICH WERE SUCCESSFUL.

1. Hahn.—Excised 80 centimetres of small gut and 20 centimetres of large gut in a man, aged 38 years. There was no disturbance of assimilation. The cause of trouble was volvulus.
2. Budberg.—Koch excised 110 centimetres for gangrenous inguinal hernia. The patient, a male, aged 38 years, recovered.
3. Budberg.—Koch excised 107 centimetres of colon for volvulus. The patient was a male, aged 42 years.
4. Troje.—Excised 115 centimetres of small intestine for tuberculous strictures. The patient was a female, aged 25 years.
5. Schlange.—Excised 135 centimetres of ileum for gangrene due to strangulation. There was no disturbance of nutrition. The patient was a female, aged 42 years.
6. Kocher.—Excised 160 centimetres of ileum for gangrenous inguinal hernia. The patient was a male, aged 57 years. There was no disturbance of nutrition.
7. Kukula.—Excised 110 centimetres of the jejunum for fæcal fistula. The patient was a female, aged 42 years. Two years later there was no intestinal disturbance, and the patient's health was excellent.
8. Trendelenburg.—Excised 85 centimetres of ileum and 20 centimetres of large intestine for fæcal fistula. The patient was a male, aged 27 years. Six months later the patient was in perfect health.
9. Kocher.—Excised 141 centimetres of ileum for intussusception of the lower part of the bowel. The patient was a male, aged 20 years. The ultimate result is unknown.
10. Budberg.—Koch excised 175 centimetres of the ileum with cæcum and vermiform appendix for strangulated scrotal hernia. There was no disturbance of nutrition. The patient was a male, aged 36 years.
11. Wullstein.—Excised 175 centimetres of ileum for strangulated hernia. The patient was a male, aged (?) years. The ultimate result is not given.
12. Schwalbach.—Excised 183 centimetres of ileum for strangulation. The patient was a female, aged (?) years. The ultimate result is not known.
13. Hinterstoisser.—Excised 186 centimetres of ileum and partly of jejunum. The patient was a female, aged 36 years. There was no disturbance of nutrition.
14. Elliott.—Excised 124 centimetres for gangrene due to mesenteric thrombosis. The patient was a male, aged 25 years, who was in good health two years later.
15. Roux.—Excised 124 centimetres for a lipoma. The patient recovered.
16. Canthorn.—Excised 109 centimetres for sarcoma of mesentery. The patient was aged 49 years. The patient recovered but died four months later from obstruction by Murphy's button.
17. Maston.—Excised 112 centimetres for sarcoma of the mesentery. The patient recovered, but died five months later from perforation due to Murphy's button.
18. Trombetta.—Excised 110 centimetres. The patient was a female, aged 40 years. She recovered.
19. Barker.—Excised 165 centimetres for gangrene due to strangulation through a hole in the mesentery. The patient was a female, aged 76 years. She recovered, though she had slight diarrhœa at first.
20. Schlatter.—Excised 192 centimetres for gangrene due to wound and prolapse. The patient was aged 23 years. During his stay in hospital he ate anything and increased in weight. A year after he had gone back in weight three kilogrammes and could not work as hard as before.

CASES OF RESECTION OF BOWEL TO THE EXTENT OF OVER TWO METRES WHICH WERE SUCCESSFUL. (QUOTED IN PAPERS BY SHEPHERD AND BY DREESMANN.)

1. Kœberle.—205 centimetres of small intestine excised for strictures. The patient was a female, aged 22 years. There was no disturbance of assimilation.
2. Kocher.—208 centimetres of small intestine excised for a railway injury. There was diarrhœa when the patient was incautious about his diet. The patient was a male, aged (?) years.
3. Dreesmann.—215 centimetres of ileum excised for gangrene. The patient was aged 37 years. Diarrhœa was easily produced by errors in diet.
4. Shepherd.—234 centimetres of ileum adherent to tumour excised. The patient was aged 28 years. There were frequent loose stools, but the patient gained 40 lb. in weight.
5. Kukula.—Excised with a mesenterial tumour 237 centimetres of ileum. The patient was a female, aged 38 years. For two and a half years she was in perfect health, then death took place from recurrence of tumour.

CASES OF RESECTION OF BOWEL OVER THREE METRES WHICH WERE SUCCESSFUL.

1. Fantino.—310 centimetres of ileum excised for gangrene. The

patient was aged 60 years. There was no emaciation at the end of a year.

2. Ruggi.—330 centimetres of small intestine excised for peritonitis. The patient was a boy, aged eight years, who was quite well a year later.

References to the effect of removal of large tracts of the small intestine.—Senn: Experimental Contributions to Intestinal Surgery, 1892. Trzebecki: Langenbeck's Archiv, Band xlviii., p. 54. Monari: Beitrage zur Klinischen Chirurgie, Band xvi., Heft 2. Dreesmann: Berliner Klinische Wochenschrift, 1899, No. 16. Shepherd: Brit. Med. Jour., 1896, p. 966. Kukula: Langenbeck's Archiv, Band lx., Heft 4. Schlatter: THE LANCET, Jan. 27th, 1900, p. 217. Paulino: Centralblatt für Klinische Chirurgie, 1896, p. 614.

Note.—Since this paper was written another case has been published by Dr. Blayney of a patient who was operated upon by Mr. Hayes in the Mater Misericordiæ Hospital, Dublin. Here 8 feet 4½ inches (= 251 centimetres) were resected for injury in a boy, aged 10 years. The patient recovered, but is now troubled by looseness of the bowels and occasional vomiting and is losing flesh.

Harley-street, W.

ON HOUR-GLASS STOMACH.

WITH LIST OF SIX CASES OPERATED UPON BY THE WRITER, AND A TABULATED LIST OF ALL CASES IN WHICH OPERATIONS HAVE BEEN PERFORMED.

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HOUR-GLASS STOMACH.

BY "hour-glass" stomach is understood that condition of the stomach in which the viscus is divided into two cavities. The cavities are generally of unequal size. The terms "hour-glass contraction of the stomach," "double stomach," "bilocular stomach" have been adopted by various authors. Hour-glass stomach may be described as "congenital" and "acquired." Congenital hour-glass stomach is commonly asserted to be the more frequent variety. Thus Fenwick writes, "In about 45 per cent. of the cases which have been recorded neither ulcer nor scar could be detected in the stomach, while in the great majority of the cases where an ulcer was present it was obviously of more recent formation than the stricture." And again, "That the deformity is a rare result of ulceration is proved by the fact that only one case of the kind is mentioned in the records of the London Hospital for 40 years, whereas several instances of the congenital form of the disease were encountered during the same period of time." Similar statements have been made by Carrington, Roger Williams, Hirsch, and, in fact, every writer who has dealt with the subject.

Now, I have examined carefully many museum specimens, I have operated upon six cases personally, and I have seen others in the practice of my friend Mr. Mayo Robson, and I say deliberately that the evidence of the existence of hour-glass stomach as a congenital deformity is insufficient to be convincing. I do not deny that congenital cases may exist, for, as a fact, they are not improbable when we contemplate the circumstances in congenital stenosis of the pylorus; but I am sceptical that any of the recorded cases of congenital deformity are in reality of such an origin. It is a noteworthy fact that in many of the so-called congenital cases, if not in all, ulceration was present in some part of the stomach. This is true of Carrington's cases, of Hudson's, Saundby's, Williams's, Saake's, and Hirsch's. In Watson's first case it is said that the mucous membrane at the point of constriction and on each side of it "is thrown into abnormally heavy ridges," which implies that a process of narrowing from a larger bulk has here occurred. In certain of the museum specimens labeled "congenital" it is quite clear that no adequate examination of the specimen has ever been made. Indeed, such an examination necessitates a so free handling of the specimen as to spoil it almost entirely for decorative purposes. The simple aspect of a pathological constriction can be most deceptive. Case 5 related below was an exemplary instance of this. The isthmus uniting the cardiac and pyloric cavities was barely the size of one's little finger; it was perfectly soft, smooth, and everywhere supple. There was no trace of any thickening or puckering of the surface. On invaginating a finger into the cavity on each side of the narrowing no orifice could be felt leading from one to the other. To all appearance no pathological process had ever existed there. On slitting the stricture up, as a preliminary to performing gastroplasty, I found the following condition. The passage was equal in diameter to a No. 4 or No. 5 catheter; most of its circumference was natural in appearance, but at the upper and anterior part was a small dead-white area, tough and clearly cicatricial, and from near this there ran, on the pyloric side vertically down to the opposing mucous surface, a column clad completely in mucous membrane and half-an-inch in diameter. I removed this column between two ligatures and it was then found to be built up of dense fibrous tissue. There was, in fact, a "bridle stricture" in the stomach. That it was pathological admits of no question, yet nothing short of a division of the stricture could have revealed its inflammatory origin. I have no doubt that if the whole stomach had been obtained from a post-mortem examination the specimen would have been proclaimed to be an admirable example of congenital hour-glass stomach.

Hochenegg on a similar case performed the operation of gastro-gastrostomy. No careful examination of the narrow stricture was made, but the case is quoted as an example of "congenital" deformity. Such a case is quite inadmissible. Doyen's case, referred to in the list, is christened "congenital." At the point of narrowing there was an ulcer adherent to the anterior abdominal wall. On separating the adhesions a gastric fistula was exposed showing unmistakeably that a localised perforation of the ulcer with anchoring was responsible for the warping of the stomach.

Williams[1] describes 10 cases of "congenital contraction of the stomach." The account of one of the cases is based on the examination of a wax model, of another on the inspection of an "inflated dried" specimen, and a third on the appearance of a "dried stuffed" specimen. It is doubtful whether one of the examples can be accepted as an "hour-glass" stomach. In all the rest pathological conditions, ulceration, puckering, thickening, and adhesion to pancreas were present. It is improbable that any one of the stomachs was the seat of a congenital deformity. The same criticism applies to Carrington's cases and to Maier's. The facts that pathological changes producing marked changes in the contour of the stomach may be inconspicuous, that ulceration in association with "congenital" deformity is frequent, and that in many of the examples no purposeful examination of the specimen has been made, warrant me in saying that congenital hour-glass stomach is certainly rare and not improbably mythical. In 20 examples of this supposed variety collected by Watson the stricture was situate in the middle in seven, at the junction of the upper and middle thirds in three, at the junction of the lower and middle thirds in four, and was not noted in six.

ACQUIRED HOUR-GLASS STOMACH.

Acquired hour-glass stomach may be caused by (1) perigastric adhesions; (2) ulcer with local perforation and anchoring to the anterior abdominal wall; (3) circular ulcer, with subsequent cicatricial contraction and induration; and (4) cancer.

1. *Perigastric adhesions.*—These may be the result of many causes; among them being perforation of a gastric ulcer. The adhesion chiefly concerned in producing the condition may be a thick cord running downwards from the liver and sharply pressing into the anterior wall of the stomach. In one of Mr. Mayo Robson's cases such an adhesion caused the cardiac end of an hour-glass stomach to be itself divided into two, thus forming a "trifid stomach."

2. *Ulcer with local perforation and anchoring of the stomach to the anterior abdominal wall.*—In this form a chronic ulcer of the anterior wall of the stomach makes its way in languid fashion through the coats of the organ. As it nears the serous coat adhesions are formed, binding it to the parietal peritoneum, which solders the base and prevents a general leakage. The stomach being then firmly anchored at this one point a sagging of the cavity on each side, but chiefly in the cardiac side, occurs, and this, with the cicatricial contraction occurring in the ulcer, results in an hour-glass stomach. An excellent example of this is Case 1, referred to below. Similar cases are recorded by Steffan and Finney.

[1] Journal of Anatomy and Physiology, 1883.

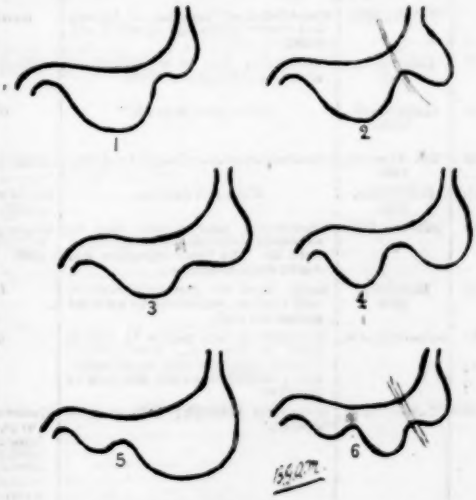
3. *Circular ulcer, with subsequent cicatricial contraction and induration.*—Such an ulcer extends transversely to the long axis of the stomach, and in its contraction while healing must inevitably cause a high degree of narrowing. The simple round ulcer is also fully competent to produce a stricture, though probably not with the same completeness as the former. The conditions found in one at least of my cases, Case 4, suggest very forcibly the likelihood of the ulcer having perforated into the general peritoneal cavity. The scar of the ulcer reached the serous coat, a tough cord-like adhesion sprang from its very middle and extended upward to the liver, while all around were extensive adhesions of varying degrees of toughness. The stricture formed in this manner may be placed at any part of the stomach; it is generally near to the middle, or rather to the pyloric side of the middle. The calibre of the orifice may vary from that of a No. 4 or No. 5 catheter to that sufficient to allow of the passage of three fingers. The greater curvature is generally puckered up towards the lesser, but the reverse is recorded in one case by Schwarz. Perforation of the ulcer at the constriction may occur, as in a case recorded by Siewers.

4. *Cancer.*—Cancer of the stomach is a not infrequent cause of hour-glass stomach. In some of the specimens the cancer has clearly been implanted upon a chronic ulcer—"ulcus carcinomatosum." In others the cancer, originating in a localised area of the stomach and there producing the constriction of the hour-glass, has in its later growth involved the greater part, or even the whole, of the stomach. The stomach then is thickened in all its coats by a diffuse growth and the condition described as "leather bottle" stomach results. This latter state was well seen in Case 6 of my list, in which jejunostomy was the operation of necessity.

SYMPTOMS.

The symptoms of hour-glass stomach are most often those of dilated stomach supervening upon chronic ulcer of the stomach. In most of the cases recorded a diagnosis of "dilated stomach" has been made, and in those dealt with surgically operative interference has been undertaken for the relief of supposed pyloric stenosis. In certain cases, however, the symptoms and signs are clear and pointedly characteristic. In Case 4 and Case 6 of my list a confident diagnosis was made thereon. Two of the most helpful signs were pointed out by Wölfler. They are as follows: 1. A phenomenon observed upon washing out the stomach. The fluid introduced into the stomach seems to disappear altogether "as though it had flowed through a large hole," and is not returned through the tube. In such a circumstance the fluid passes, it is obvious, from the one compartment to the other. 2. It was further noticed that when the stomach was washed out until the lotion returned clear a sudden, unlooked-for gush of foul or even putrid fluid occurred; or, if, after gentle lavage until the stomach seemed clean, an interval of a few minutes was allowed to elapse and the tube again passed, foul or dirty fluid at once returned. This is due, doubtless, to the reflux of the contents of the pyloric cavity through the stricture. Jaworski[2] noticed in one instance that after apparently emptying the stomach by passing the tube a splashing sound could still be obtained by palpation over the gastric area. The pyloric cavity, which is not drained by the stomach-tube, causes this suggestion of dilated stomach. The condition has been aptly described as "paradoxical dilatation." Eiselsberg remarked in one of his cases that upon injecting a quantity of fluid into the stomach there were a bulging and distension of the left side of the epigastrium; after a few moments this gradually sank and subsided and simultaneously a swelling of the right side of the epigastrium slowly developed. A sign to which Eiselsberg also called attention in this case was well exhibited in Case 4 in my list. On distending the stomach with CO_2 the bubbling and gushing of fluid through a narrow chink could be heard with the stethoscope, an observation that was repeated in Watson Cheyne's case. Case 4 also showed a sign the existence and the value of which I have not seen emphasised before. On examining the abdomen I carefully percussed out the limits of the stomach. After distending with CO_2 the area of tympany, previously marked out upon the lower part and side of the chest wall in front, was more than doubled in size. At the same time a small distended stomach, as it seemed, occupied the epigastrium and a narrowing to its left was clearly seen. Auscultation over this narrowing revealed the sign above mentioned. As the limits of the epigastric swelling were sharply defined and unmistakeable and as there was a doubling of the subcostal tympany, there was clearly a constriction between the two inflated cavities and this constriction must be the isthmus of an hour-glass stomach. Investigation in this manner would have revealed this sign very clearly in Pollard's case and in Childe's case recorded in the list. There can be no risk in distending the stomach with CO_2 and therefore this method should be adopted in all doubtful cases. It seems not unlikely that the sign will be most helpful in making an accurate diagnosis. In two cases seen by Schmidt-Monard and Eichhorst a distinct sulcus separating two dilated cavities was seen on inflation with CO_2.

The symptoms resulting from a narrowing in the stomach will naturally depend upon the part of the viscus affected. If the contraction be near the pylorus the cardiac pouch will distend to almost any capacity and the clinical picture will be that of dilatation of the stomach. If the stricture be placed but a little way from the cardia the symptoms will suggest œsophageal obstruction. The differential diagnosis can, however, be achieved by noting the distance which the œsophageal bougie



Types of hour-glass stomach. 1. Constriction near the cardia; simulates œsophageal obstruction. 2. Cardiac complement hidden by adhesion. Thorough examination of the whole stomach is necessary. 3. Constriction with much induration. 4. A narrow channel connects the two pouches. 5. Constriction near the pylorus; simulates pyloric obstruction. 6. Hour-glass stomach; the cardiac complement subdivided by an adhesion; "trifid stomach."

passes. In Case 6, seen with Dr. J. Sykes of Cleckheaton, a correct diagnosis was made and a seemingly accurate estimate of the capacity of the cardiac pouch was formed by observing the following symptoms. When the patient took a tablespoonful of milk he retained it; if an ounce or two were drunk at a gulp the greater part was returned. The stomach-tube passed 18 inches without difficulty. On attempting to wash the stomach out one ounce or a little more of fluid passed in, but no more. We administered a seidlitz powder in separate halves. The first half was retained; on administering the second the patient was overwhelmed by a gush of foam which burst from his mouth and nostrils. The diagnosis of hour-glass stomach, with a smaller cardiac and a larger pyloric segment, was made. At the operation this condition was found: it was the result of malignant disease which had already caused secondary deposits in the parietal peritoneum and ascites.

The characteristic signs which may, singly or in association, be present, then, are: (1) disappearance of fluid introduced through the stomach-tube, "as though it had flowed through a hole" (Wölfler); (2) after cleansing of the stomach by lavage a sudden gush of putrid, sour, ill-digested food, &c.

[2] Wiener Klinische Wochenschrift, 1898.

PUBLISHED CASES.

No.	Operator and date.	Condition found.	Nature of operation.	Result.	Reference.
1	Bardeleben, 1889.	Hour-glass stomach.	Gastroplasty.	Recovery and relief.	Klemperer, Berliner Klinische Wochenschrift, 1889.
2	Kruckenberg, 1892.	Thickened scar on the anterior surface.	Gastroplasty, with excision of ulcer.	Recovery with complete relief.	Münchener Medicinische Wochenschrift, 1893, No. 19 (Schmidt-Monard).
3	Zeller, 1893.	Hour-glass stomach the result of healed ulcer cicatrix.	Resection of cicatrix of healed ulcer.	Death from septic peritonitis result of perforation of another ulcer.	Centralblatt für Chirurgie, 1894.
4	Doyen, 1893. (This case is called congenital!)	Constriction at middle of stomach due to ulcer adherent to the anterior abdominal wall. On separating adhesions a gastric fistula was found.	Scraping of ulcer; and inversion; gastroplasty.	Recovery.	Traitement Chirurgical des Affections de l'Estomac, Paris, 1896, p. 308.
5	Wölfler, 1894.	Stomach constricted into two equal portions by scar of ulcer.	Gastro-gastrostomy.	Recovery; at the end of three months quite well and had gained nine kilogrammes in weight.	Beiträge zur Klinischen Chirurgie, 1895, No. 13.
6	Eiselsberg, 1894.	Cicatrix of old ulcer.	Gastro-gastrostomy.	Death; sutures introduced into indurated area had cut through. Septic peritonitis.	Archiv für Klinische Chirurgie, Band l.
7	Watson, 1895.	Constriction at junction of middle and lower thirds the result of old ulcer.	Gastro-gastrostomy.	Recovery; complete relief; gained 42 pounds in six months.	Boston Medical and Surgical Journal, 1896.
8	Lauenstein, 1895.	Constriction due to cicatrix from which adhesions ran to liver.	Gastro-gastrostomy.	Recovery; in three months gained 35 pounds.	Münchener Medicinische Wochenschrift, 1896, No. 43.
9	Langenbuch, 1896.	"Hour-glass stomach."	Gastroplasty.	Recovery without relief.	Berliner Klinische Wochenschrift, 1896; Thèse de Lyons, 1896.
10	Van Noorden, 1896.	Perforation of the stomach by ulcer.	Establishment of fistula.	Death on fifty-sixth day.	Münchener Medicinische Wochenschrift, 1896.
11	Hofmeister, 1896.	Ulcer and cicatrix.	Excision of ulcers; gastroplasty.	Recovery.	Beiträge zur Klinischen Chirurgie, 1896.
12	Schwarz, 1896.	Constriction near middle due to adhesions extending to diaphragm, liver, &c. The lesser curvature was drawn down to greater.	Gastro-gastrostomy; gastrolysis at second operation.	Symptoms not improved until after second operation.	Wiener Klinische Wochenschrift, June, 1896.
13	Eiselsberg, 1896.	Large ulcer on greater curvature, near fundus; adhesions to anterior abdominal wall.	Gastroplasty.	Recovery; return of symptoms after nine months.	Archiv für Klinische Chirurgie, 1899.
14	Jaboulay, 1896.	Constriction very narrow in pyloric third of stomach. Both cavities dilated. Cicatrix near lesser curvature; adhesions to the left lobe of the liver.	Gastroplasty.	Recovery; relief of symptoms.	Archives Provinciales de Chirurgie, 1896.
15	Tuffier, 1897.	Hour-glass stomach; both cavities dilated.	Gastro-enterostomy between cardiac pouch and intestine; symptoms not wholly relieved. At a second operation a gastro-enterostomy between pyloric pouch and intestine.	Recovery from both operations; complete relief after the second.	Bulletin et Mémoire de la Société de Chirurgie, 1897.
16	Watson Cheyne, 1897.	Constriction permitting passage of a crow-quill only in middle of the stomach. Both parts of the stomach dilated.	Gastroplasty.	Recovery.	THE LANCET, March 19th, 1898, p. 785.
17	Eiselsberg, 1898.	Constriction admitting little finger in pyloric third of organ; adhesions to liver and pancreas; perigastric abscess.	Gastroplasty.	Death in 10 hours.	Archiv für Klinische Chirurgie, Band lix.
18	Eiselsberg, 1898.	Constriction in middle of the stomach; adhesions to posterior abdominal wall and liver and erosion of pancreas by open ulcer.	Gastroplasty; jejunostomy.	Death in 12 hours.	Ditto.
19	Eiselsberg, 1898.	Constriction admitting the little finger in the pyloric third of the stomach.	Gastroplasty; 12 months later gastro-enterostomy.	Recovery from both operations. Symptoms recurred nine months after the first operation.	Ditto.
20	Eiselsberg, 1898.	Circular constriction nearer cardia than pylorus.	Three operations: two gastro-plastic, one gastro-gastrostomy; intervals were four, nine, and two months.	Recovery from operations, but recurrence of symptoms after all.	Ditto.
21	Eiselsberg, 1899.	Constriction admitting the passage of one finger due to circular cicatrix and adhesions to liver.	Gastroplasty.	Recovery with entire relief.	Ditto.
22	Eiselsberg, 1899.	Circular constriction nearer cardia than pylorus; dense mass of adhesions from constricted portion of stomach to liver.	Gastro-enterostomy.	Recovery and complete relief.	Ditto.
23	Von Unge, 1898.	A circular constriction admitting forefinger eight centimetres from pylorus.	Gastroplasty.	Recovery.	Centralblatt für die Grenzgebiete der Medicin und Chirurgie, May, 1899.
24	Von Unge, 1898.	A circular constriction admitting forefinger 10 centimetres from pylorus; a mass of adhesions.	Gastroplasty.	Recovery.	Ditto.

PUBLISHED CASES (*Continued*).

No.	Operator and date.	Condition found.	Nature of operation.	Result.	Reference.
25	Hastings Gilford, 1898.	Hour-glass stomach; the constriction barely admitted one finger. On the cardiac side of the constriction an ulcer had perforated and formed an adventitious cavity.	Gastroplasty.	Died one month after operation from hæmatemesis. The wound in the stomach was partially unhealed at the point of thickest induration.	Guy's Hospital Reports, Vol. liii., 1898.
26	Courmont, 1898.	Hour-glass stomach.	Gastroplasty.	Recovered.	Hochenegg, Wiener Klinische Wochenschrift, 1898.
27	Cumston, 1898.	Constriction at the junction of the middle and lower thirds; adhesions to surrounding structures.	Gastroplasty.	Recovery; well eight months after.	New York Medical Journal, 1899.
28	Hochenegg, 1898.	Constriction at junction of middle and pyloric thirds; admitting little finger; cardiac portion immensely distended.	Gastro-gastrostomy.	Recovery.	Wiener Klinische Wochenschrift, 1898.
29	Watson, 1900.	Perforating ulcer, with perigastric abscess and a mass of adhesions at the junction of the middle and lower thirds; stricture admitting one finger.	Ulcer inverted and sutured; gastrolysis.	Death on fourth day from general septic peritonitis.	Annals of Surgery, July, 1900.
30	Klein, 1900.	Hour-glass stomach the result of cicatricial contraction following the drinking of corrosive fluid.	Gastro-duodenostomy.	Recovery and entire relief.	Wiener Klinische Rundschau.
31	Sidney Martin and Bilton Pollard, 1900.	Hour-glass contraction and stenosis of pylorus. At the first constriction there was a small perigastric abscess. The second compartment was much larger than the first. Pylorus very stenosed and peripyloric abscess found; due to perforating ulcer just beyond pylorus.	Gastro-jejunostomy. The second compartment of the stomach united to the intestine.	Death on fifth day.	Brit. Med. Jour., vol. ii., 1900.
32	Childe, 1901.	Hour-glass stomach. The cardiac portion lay under cover of the ribs and was not noticed until the necropsy. The pyloric portion was supposed to be the whole stomach and "was not abnormally large."	Gastro-enterostomy, between pyloric segment and jejunum.	Death on fifth day.	Ditto, 1901.

This list includes all published cases with the exception of Mr. Mayo Robson's, which will be reported shortly.

PERSONAL CASES DEALT WITH BY OPERATION.

No.	Date.	Sex.	Age: years.	Symptoms and description.	Condition found; operation.	Result.	Remarks.
1	August, 1899.	F.	29	Ten years ago the patient had an illness characterised by profound anæmia. Seven months ago there were clear symptoms of ulcer of the stomach, but neither then nor at any time any acute illness suggestive of perforation. Now vomited after all ordinary food, and more often than not even after small quantities of fluid food. Pain after food was exceedingly severe. On examination of abdomen a dilated stomach could be felt. At one point, a little to the left of the middle line and slightly below the ensiform cartilage, was an area two inches in diameter which was markedly tender and offered increased resistance on palpation. This area was found at the operation to correspond precisely with the area of stomach adhesion. The patient had lost weight and deteriorated seriously in general health during the last few months.	Hour-glass stomach, the narrow constriction being near the middle of the stomach and adherent to the anterior abdominal wall over an area equal to a crown piece. On each side of this the stomach dilated and seemed to be anchored by the adhesion. On separating the stomach from the abdominal wall an opening into the viscus was exposed and the stomach contents escaped. This opening was enlarged transversely and the wound and fistula were stitched up vertically. An omental graft was brought to cover in the sutured area in order to guard against future anchoring.	Recovery.	For a month after the operation there were pain at times and loss of appetite. Since then she has been free from pain and in excellent health. Appetite and digestion are good. Patient seen with Mr. Bailey, Horsforth.
2	April, 1900.	F.	27	There was no history of gastric ulcer. The patient had complained of irregular attacks of pain in the epigastric region for 11 months, always associated with the taking of food, and coming on about one hour after a meal. Vomiting was occasional and irregular, in rather large quantities; there was no blood. On examination the stomach was distended and splashy; contractions were seen when distended. Medical treatment had proved unavailing.	Hour-glass stomach. The constriction was about four inches from the pylorus; the passage between the two sacs equalled a No. 12 catheter in diameter. There were marked induration and puckering, but no adhesion to the abdominal wall or elsewhere. The strictured neck was divided by an incision about two and a half inches long in the transverse direction and stitched up vertically, the mucous membrane with a continuous cat-gut suture and the serous with a continuous silk suture. Two additional interrupted sutures were applied at each end of the wound.	Recovery.	Vomiting for five days after the operation, blood-stained. Since then perfectly well. Patient seen with Dr. Waugh, Skipton.

PERSONAL CASES DEALT WITH BY OPERATION (*Continued.*)

No.	Date.	Sex.	Age: years.	Symptoms and description.	Condition found; operation.	Result.	Remarks.
3	Jan. 24th, 1901. Hospital, Registered No. 443.	M.	45	Ailing for three years. Pain in the epigastrium radiating to the left chest. Was worse after food, coming on "within half an hour" and lasting for from two to four hours unless relieved by vomiting. Frequently vomited about an hour after food; never any blood. Lately the pain had been almost constant, aggravated by food, and eased by vomiting. Had lost 2st. 12lb. Dilated stomach. On distending with CO_2 a notch was noticed at the upper border of the stomach and a tentative diagnosis of hour-glass stomach was made. Free HCl. A trace of lactic acid and a few rod-shaped bacilli.	An hour-glass stomach. The scar of the ulcer was equal in size to a florin, was situated close to the lesser curvature and nearer the cardiac orifice than the pyloric. There were much puckering and induration of the surface. There were no adhesions. The index finger entered but could not pass the stricture. An incision three and a half inches long was made transversely and stitched longitudinally in two layers. A slender adhesion of gall-bladder to the pylorus was divided. (Gastroplasty, gastrolysis.)	Recovery. Before leaving hospital the ordinary diet without any discomfort.	Weight before operation, 8st. 6lb. Patient seen with Dr. Trevor Pritchard, Retford.
4	March 6th, 1901. Infirmary, Registered No. 1221.	F.	23	Symptoms of gastric ulcer for more than five years. Was under treatment at beginning of illness at the infirmary. Had been gradually getting worse. Vomited now after every meal; pain and vomiting came on about from half an hour to one hour after food. Vomit was very "sour." On examination, hour-glass stomach. On distending with CO_2 the cardiac half increased considerably, forming a very large lymphatic area. The pyloric half distended but little; the division was clearly seen. On auscultation a forcing, gurgling sound was distinctly heard.	Hour-glass stomach. The cardiac side of constriction was much dilated and larger than a normal stomach. Rather beyond the middle of the organ was a constriction that would just admit the forefinger; round constriction were much induration and many adhesions; especially noticeable was one thick cord-like one coming from the liver. This was divided between ligatures. The liver was slightly torn on separating widespread adhesions along the lesser curvature. Below it on each side the stomach sagged and between the cavities an anastomosis was made which readily admitted three fingers. (Gastro-gastrostomy, gastrolysis.)	Recovery.	Patient seen with Dr. Waugh, Skipton.
5	March 9th, 1901. Infirmary, Registered No. 1437.	M.	55	Stomach troubles for 16 years. At first pain after food and occasional vomiting. Five years ago an acute attack of hæmatemesis, melæna, and general swelling of the body, which it was feared might prove fatal (? perforation). No ease in the stomach since then; constant vomiting, pain after every meal, and great wasting. Now looked thin, pinched, and shrivelled. For three weeks had had no food, only sips of water and nutrient enemata. On examination, dilated stomach. Free HCl.	Hour-glass stomach. At first it was thought to be a dilated stomach; on tracing the stomach towards the pylorus an extremely narrowed isthmus (barely as thick as the little finger) was come to which was supposed to be narrowed pylorus, but on tracing beyond it stomach was still found. On invaginating a finger from each side of constriction no opening could be felt. Many adhesions were separated until all was clear and free. Then incision into the stomach or cardiac side of the isthmus and a probe-director was passed through constriction, which it fitted snugly, the opening being no bigger than a No. 4 or No. 5 catheter. Gastroplasty was performed. On the pyloric side of the stricture was a column of mucous membrane forming a bridle stricture. This was ligatured, divided at both ends, and removed.	Recovery.	Patient seen with Dr. Mackay, Knaresborough.
6	March 3rd, 1901.	M.	54	Vomiting of fluid if taken in quantities exceeding an ounce (see text).	Hour-glass stomach. Narrowing close to cardia due to malignant disease which had invaded the stomach everywhere. (Jejunostomy.)	Recovery (operation, March 12th).	Patient seen with Dr. Sykes, Cleckheaton. Is not making any material improvement.

(Wölfler); (3) "paradoxical dilatation," succussion splash in pyloric cavity after syphonage of the cardiac loculus (Jaworski); (4) distension of cardiac loculus, its gradual subsidence, and concomitantly the distension of the pyloric loculus (Eiselsberg); (5) during this period a gurgling, forcing sound heard over, or near, the middle of the stomach (Eiselsberg); (6) on distension with CO_2 a large increase even to a doubling in the thoracic area tympanitic on percussion and a slight distension, clearly demarcated, of the pyloric loculus (Moynihan); and (7) rarely a sulcus may be seen on inflating with CO_2 (Schmidt-Monard).

TREATMENT.

The following operations have been practised in cases of hour-glass stomach: (1) gastroplasty, with or without resection of the ulcer; (2) gastro-gastrostomy or gastro-anastomosis; (3) gastro-enterostomy; and (4) partial gastrectomy. Frequently, owing to the existence of adhesions, gastrolysis has to be performed in addition to the operations mentioned.

The choice of an operation will be determined by the conditions found at the operation. It is essential that a careful and complete examination of the whole stomach should be made before any procedure is adopted. For in some of the cases related below it will be noticed that the lack of adequate and precise knowledge has led to futile measures and fatal results. If the constriction be near the middle of the stomach, if there be little induration and no active ulceration, and if the pylorus be free, a gastroplasty will prove successful. If the constriction be in any part of the middle third or half of the stomach, if the pouches on each side are "sagging" and free from adhesion, and if the pylorus is free, a gastro-gastrostomy will suffice to effect a cure. If, however, the stomach narrowing be associated with pyloric stenosis, the existence of which must be suspected if the pyloric segment is dilated also, no single operation will suffice. A gastroplasty and a pyloroplasty, or a gastroplasty and a posterior gastro-jejunostomy must both be performed. It is possible that in some cases, such as that of Schwarz, where the lesser curvature is dragged down to the greater, that the incision dividing the constriction in the stomach might be utilised for the purposes of an anterior gastro-jejunostomy. If on separating parietal adhesions a gastric fistula be found as in Doyen's case and in Case 1 of my list, the ulcer may be excised, or its edges may be trimmed, and a gastroplasty may be performed. If the constriction be due to new growth, a partial or complete gastrectomy may be performed. If these prove not feasible, a palliative jejunostomy may be necessary, as in Case 6.

Various operators have expressed individual preference for certain methods. Thus Eiselsberg, whose experience has been extensive, prefers gastro-enterostomy. He has performed 11 operations upon eight patients; three of the patients died as a result of the operation, and of the five survivors one suffered from a recurrence of the symptoms at the end of nine months. Eiselsberg objects to gastroplasty, that recurrence of the stenosis is probable. The same objection has been brought by Berg and others against pyloroplasty. The probability is that while the process of ulceration is still active it is unwise to perform a gastroplasty or a pyloroplasty, but that when the healing is complete, when perigastritis is absent, and the incision through the stricture is of good length, no relapse need be feared. It is especially important to observe the condition of the pyloric portion of the stomach. If the isthmus be a narrow one the pyloric segment should be small and empty. If the pyloric cavity be dilated, as is expressly noted in Jaboulay's case and in Watson Cheyne's, there is a strong presumption in favour of the existence of a pyloric narrowing. If such narrowing be present and a gastroplasty alone be performed, the operation, though "successful" so far as recovery is concerned, cannot be expected to relieve the patient of all disabilities, and a second operation may be imperative.

1. *Gastroplasty.*—This is an adaptation to the body of the stomach of Heineke's operation for pyloric stenosis. It was performed by Bardeleben in 1889, by Kruckenberg in 1892, and later by Zeller and Doyen. A transverse incision, four inches in length at least, is made, dividing the stricture. The incision is then stitched up vertically. Two continuous layers of sutures are introduced, one for the mucous membrane only, or all the coats, and the other for the serous and sub-serous coats alone.

2. *Gastro-gastrostomy or gastro-anastomosis.*—This was first performed by Wölfler in 1894. The incisions made into the dependent pouches on each side of the constriction were vertical and seven centimetres in length. An adequate anastomosis between the two halves was thus made. Sedgwick Watson in 1895 successfully performed gastro-anastomosis in a different manner. The incision in the two segments of the stomach were transverse. The pyloric portion of the viscus was folded over the cardiac, with the constricting isthmus as a hinge, and the two were stitched together with an elliptical line of sutures before being opened. The anastomosis was then made by incising the wall of the pyloric compartment which now lay anterior and through the opposite surface, making the anastomosis. This method is unnecessarily cumbersome and possesses no potential advantages over Wölfler's method.

3. *Gastro-enterostomy.*—If the anastomosis is made between the pyloric cavity and the intestine the operation must obviously be ineffective, as the constriction is not relieved. If between the cardiac cavity and the intestine the pyloric loculus will be undrained and a second operation, as in Tuffier's case, may be necessary.

4. *Partial gastrectomy.*—In cases of cancer always, and in certain cases of simple disease, a partial gastrectomy may be the operation of choice. In cancer a wide excision should be made; in simple disease a removal of the constriction will suffice. In both an end-to-end suture is desirable.

Leeds.

REVERSED PULSUS PARADOXUS DUE TO ANEURYSM OF THE AORTIC ARCH.

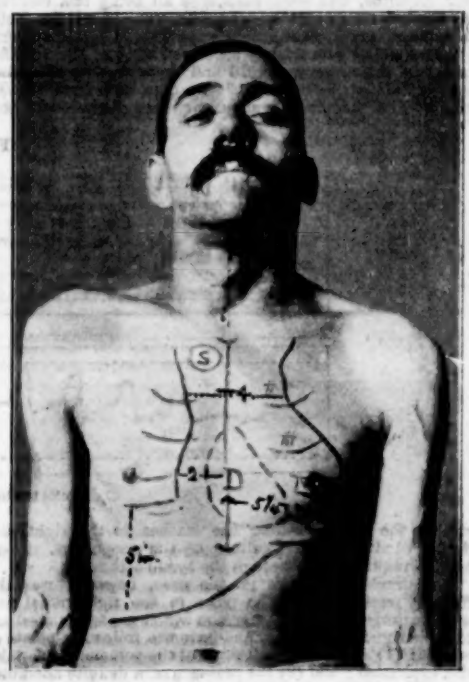
BY JOHN HAY, M.B., CH.B. VICT., M.R.C.S. ENG., L.R.C.P. LOND.,

MEDICAL REGISTRAR AND TUTOR, LIVERPOOL ROYAL INFIRMARY; LATE ASSISTANT MEDICAL OFFICER, MILL-ROAD INFIRMARY, LIVERPOOL.

RESPIRATORY variations in the radial pulse due to aneurysm must be of comparative rarity, as I can find no mention of such a condition in the works of Sansom, Gibson, Fagge, Osler, Pepper, and others. These authors all describe variations from the normal in the radial pulse as a frequent accompaniment of aneurysm and they emphasise the importance of these variations as aids in the localisation of the aneurysm. The variations are (1) complete absence of one radial pulse; (2) inequality of the two radial pulses in volume as felt by the fingers; (3) difference in the character of the sphygmograms; and (4) delay in pulse at one or other wrist. They are caused by a number of conditions: (1) disease at the mouth of a vessel rising from the arch; (2) deposit of fibrin producing narrowing or occlusion of a vessel; (3) aneurysmal dilatation of a vessel; (4) pressure on a vessel by an aneurysm; or (5) involvement of a vessel on the sac of an aneurysm. The case which I am recording, however, presented the interesting feature of a rhythmical variation in the right radial and right carotid pulses coincident with respiration and was due to the innominate artery being compressed between the aneurysm behind and the sternum and costal cartilages in front, the lumen of the artery being almost occluded towards the end of expiration.

The patient, a man, died in February, 1900, at the age of 36 years. Until the early part of 1897 he had been in good health, but at that time he began to suffer from difficulty in breathing. This became worse, and he was admitted as an in-patient to the Liverpool Royal Infirmary, and since then, up to the time of his death, he was constantly a patient in one or other of the Liverpool hospitals. He had worked as a stoker on board steamers and, as is so often the case with that class, he drank large quantities of fluid, chiefly water, indulging also in beer and stout. In 1886 he had a slight attack of rheumatism and in 1889 he contracted syphilis. When in India and Brazil he also suffered from malaria. Thus we have as etiological factors—syphilis, strain, excess in fluids, malaria, and possibly rheumatism. He complained of pain all over the back and chest when he coughed. This pain was most severe between the shoulders, especially to the left of the middle line, and tenderness was present over the same area. He also suffered from constant headache, and a heavy, dizzy feeling. He had frequently the sensation of being suffocated, and he could not lie down with comfort, but had to be propped up in bed. Swallowing anything solid was painful.

FIG. 1.



Shows (1) area of heart and aorta as mapped out on chest; (2) larynx pushed to the right of the middle line by the aneurysm; and (3) distended veins of the arms. S, site of maximum intensity of the systolic murmur, situated over the origin of the innominate artery. D, site of area of the faint diastolic murmur.

On examination it was noticed that the trachea and larynx lay more to the right than normal and that with each beat of the heart they made an excursion still further to the right. Associated with this condition, and perhaps partly

due to it, there was a fulness of the right side of the neck. The veins of the arms were engorged and prominent. The manubrium and inner end of the left clavicle were both observed to move forward with the systole of the heart and on palpating in the suprasternal notch or behind the left clavicle a most distinct expansile pulsation was felt. Tracheal tugging was present. He was much troubled by a cough, bass and deep but wheezy and non-explosive. Examination of the larynx revealed that his left vocal cord was shortened, white, and motionless. The left pupil was smaller than the right. The area of cardiac dulness was much larger than normal. At the level of the second costal cartilage the transverse dulness measured four inches. The illustration shows the limit of cardiac and aortic dulness as mapped out with a pleximeter. The photograph was taken after marking out the area on the chest with Indian ink, so that we have an exact representation of the actual condition (Fig. 1).

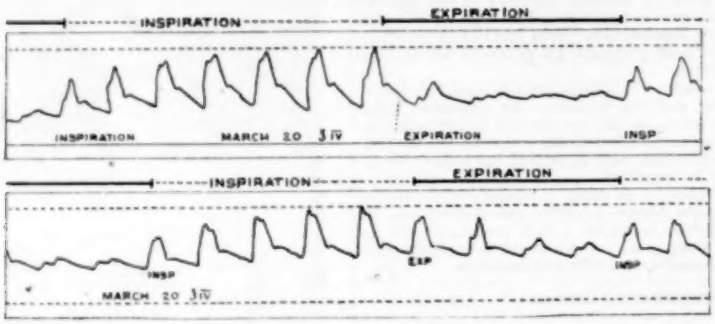
Two murmurs were audible. One was a systolic murmur which was loudest over the first right cartilage at the area marked S. It was rough and short and it varied with respiration and was conducted up into the neck, more especially so on the right side. The other, a diastolic murmur, could not be heard over the right second intercostal space, but it commenced at the level of the third costal cartilage, D, and was loudest over the lower end of the sternum. It was conducted towards the axilla and was a faint, blowing murmur not influenced by respiration. On auscultating between the scapulæ a short systolic murmur was audible, conducted almost down to the lumbar vertebræ. No pulse could be felt in the left carotid, axillary, or radial arteries, whilst the pulse in the right radial and carotid arteries varied in the most peculiar manner with respiration. The radial pulse was rather water-hammer in character. Air did not appear to enter the left side of the chest as freely as it did the right, the expansion, breath-sounds, vocal fremitus, and vocal resonance all being less marked over the left than over the right side. The percussion note was not impaired. The patient expectorated a fair amount of mucus which occasionally contained blood. The specific gravity of the urine was 1018 and there was no albumin. Such is briefly the outline of the case and from it was gathered the presence of an aneurysmal dilatation of the arch of the aorta pushing the trachea to the right and slightly diminishing the calibre of the œsophagus. There was also regurgitation through the aortic orifice.

The interesting feature in the case, however, was the effect of respiration on the pulse in the right radial and carotid arteries. The two tracings which are reproduced are from the right radial artery and have the following points of interest: (1) a marked diminution of the volume of the pulse with expiration; and (2) the presence of a definite anacrotic wave the position of which in the upstroke of the tracing varies with the respiratory variation (Fig. 2). It was noticed that during expiration, especially if the act were exaggerated, the radial pulse at the right wrist disappeared. This condition existed also in the right carotid artery, but there was no evidence of respiratory variation in a pulse tracing from the anterior tibial artery. It was also observed that this phenomenon was only present when the patient was in certain positions, it being most marked when he sat up and turned to the left. It was also present when he lay semi-recumbent and leaning to the left. Turning over to the right side, especially when semi-recumbent, did away with the variation and the pulse became regular. Another most interesting fact was noted which considerably assisted in an accurate diagnosis—namely, that the systolic murmur, which, as we have seen, had its area of greatest intensity over the site of the origin of the innominate artery, also varied in intensity with the respiratory movements, becoming much louder and harsher during expiration and diminishing during inspiration. When the right radial pulse was small or almost imperceptible the systolic murmur was loudest and harsh. As the pulse regained its volume and force the murmur lost in audibility and roughness. The diastolic murmur, on the other hand, did not change, but was constant in character and intensity.

One of the most common causes of well-marked anacrotism is aortic stenosis, and it is also recognised that stenosis produced either naturally or artificially in any artery may give rise to an anacrotic pulse beyond the constriction. Here we have an anacrotic wave which varies in position in the up-stroke of the tracing, at one time being almost on the base line, while a few beats further it is seen reaching almost to the top limit of the tracing. Note that this variation in the position of the anacrotic wave is regular. On examining a number of tracings the anacrotic wave could be seen ascending higher with each pulsation, reaching its limit and then descending more or less regularly towards the base line.

One of the tracings reproduced shows a variation from a slight anacrotic curve on the base line to a record which gives no anacrotic wave at all. The inference made from this was that in this case the position of the anacrotic wave indicated the extent of the stenosis. With marked obstruction the wave approached the base line and with slight obstruction the summit of the tracing. We had, therefore, three conditions varying with respiration: (1) pulse volume; (2) position of anacrotic wave; and (3) systolic murmur over the origin of the innominate artery. This rhythmical variation in the pulse was therefore considered to be due to "a mechanical cause, probably some kinking of the innominate artery during expiration, as the chest wall descended." The first and second of these conditions suggested the existence of some stenosis which varied with respiration, and the fact that this reversed pulsus paradoxus was present in both the right carotid and the radial arteries together with the third condition pointed to the origin of the innominate artery as the spot where the obstruction to the blood-flow took place.

FIG. 2.



Pulse tracing of right radial.

The post-mortem examination, at which, through the courtesy of Dr. J. Lloyd Roberts, I was present, cleared up the case. It was found that there was considerable dilatation of the whole arch of the aorta, more especially of the transverse portion (Fig. 3). The aneurysmal dilatation extended upwards rather irregularly, one rounded projection having crept up and become tightly adherent to the anterior surface of the trachea. In the production of the dilatation it was chiefly the posterior portion of the aorta in the region of the transverse arch which had distended, the result being that the innominate and left carotid arteries, instead of arising from the convexity of the arch, as is usually

the case, sprang from its anterior surface, and consequently as the sternum and bony thoracic wall descended with expiration these two arteries were caught and compressed between the thoracic wall in front and the aneurysm behind. The result of this pressure on the left carotid artery had flattened it down on to the aneurysm and had obliterated its lumen. When the patient leaned to the right his heart and aorta would be slightly displaced in that direction and so the

FIG. 3.

Photograph of the heart and aneurysm of the aorta, seen from the front. I., Innominate artery rising from the anterior portion of the aneurysm. L. S., Shrivelled left subclavian artery. L. C., Shrivelled left carotid which was flattened down and adherent to the front of the aneurysm.

innominate artery was freed from compression. Thus was caused the increasing and decreasing obstruction in the innominate artery which gave rise to the rhythmical variation in the pulse. The aorta was much dilated as far as the lower border of the seventh dorsal vertebra, the bodies of the fifth, sixth, and seventh vertebræ being deeply eroded. The œsophagus was compressed by the dilated aorta. The valves of the heart were normal with the exception of the aortic cusps which were somewhat fibroid and allowed of free regurgitation. The heart itself was considerably hypertrophied and dilated.

In conclusion, I desire to express my indebtedness to Dr. Nathan Raw for permission to publish this case.

Liverpool.

HEALTH OF BATH.—Dr. W. H. Symons, the medical officer of health of Bath, reports that 933 deaths were registered in Bath during 1900, which is equal to a crude death-rate of 17·72 per 1000. Excluding the deaths of persons who had been brought to Bath for treatment at the public institutions, the corrected death-rate corresponded to 15·24 per 1000 compared with 15·83 in 1899. The zymotic death-rate was 0·70 per 1000. The number of deaths under one year of age was 121, which is equivalent to an infantile mortality of 126 per 1000 births.

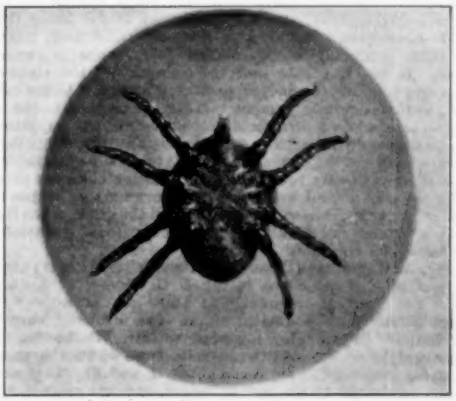
CASE OF A PARASITE—"ARGAS (OR ORNITHODORUS) MÉGNINI" (DUGÈS)—IN EACH EAR.

BY J. CHRISTIAN SIMPSON, M.D. EDIN.

[WITH A NOTE ON THE ANATOMY OF THE SPECIMEN BY E. G. WHELER.]

ON August 26th, 1900, Professor —— brought me a living specimen of this tick, which he said came from his right ear of its own accord on the previous day. On examination of this ear nothing abnormal was detected, and there was only a very small amount of wax. The left ear, however, was completely filled with cerumen, and some soda drops were prescribed to soften it before removal. Next day a considerable plug of wax and epithelium was syringed out, and on further examination a parasite similar to, but smaller

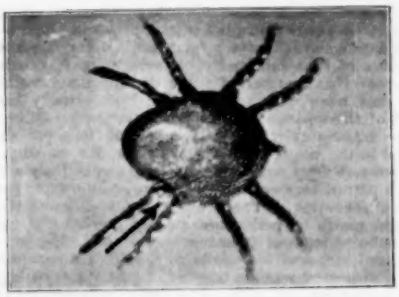
FIG. 1.



Pupa or Nymph of Argas (or Ornithodorus) Mégnini (Dugès). Ventral aspect. (Undistended specimen.) Photograph × 6.

than, the other specimen was plainly visible closely applied to the tympanum. On touching it with a probe its four pairs of legs were freely moved, but it would not be coaxed to come out. This condition was corroborated by Mr. Herbert of Natal, who happened to be with me, and kindly

FIG. 2.



Dorsal aspect. Arrow shows situation of stigmatic organ, described by Mr. E. G. Wheler of Alnwick, which is seen protruding on the other side. Actual size of tick three-sixteenths of an inch long. Photograph × 6.

saw my patient at the time. Mr. Herbert informed me that he had removed a tick from the tympanum of a little girl in Natal, where such parasites are pretty common, but he had not seen an instance where each ear contained one

animal. As it is very important not to leave any portion of the suckers or hooks in the tissues, more especially in the drum, I adopted his suggestion of soaking a small pledget of wadding with chloroform and inserting it into the canal for a few seconds the tick was rapidly killed and was easily removed by syringing. On examination it was found to be entire, and no injury was visible to the drum of either ear.

The previous history of the patient was that he had camped out in Arizona in the month of June. He returned to his home in Massachusetts, U.S.A., at the end of that month and then "had some curious sensations in the left ear, a sort of pain above the ear, and a rattling sound in the ear. These feelings decreased and had almost passed away, though the rattling was occasionally heard" up to August 25th when the live parasite came from the right ear, which apparently had not been the subject of any striking abnormal sensations. Cases of living animals in an auditory canal are not very uncommon, but the instance now recorded seems unusual in several respects. There was, in the first place, an absence of general or local ear symptoms sufficiently severe or annoying to necessitate a surgical examination previously to his visit to me. Again, the fact that each ear contained one specimen of the same species of tick is certainly curious, and the possibility of its living there and developing during a period of fully two months without producing more marked disturbance is remarkable. It was fortunate that the occupant of the right ear was free to crawl out and so to attract attention to the other ear, as it was certainly impossible for the parasite in the left ear to escape of its own accord on account of the ceruminous plug completely filling the auditory canal. It might, therefore, at any moment have seriously injured the tympanum if not so opportunely released. The question naturally arises, why the wax should have so rapidly accumulated in the one ear to the extent of occlusion and not in the other, when there was a similar and simultaneous source of local irritation to stimulate its secretion.

Mr. A. E. Shipley (Cambridge University lecturer) kindly forwarded my specimens to Mr. E. G. Wheler of Alnwick, who has been good enough to allow me to append his description of a stigmatic organ not hitherto observed in action. I am also indebted to Mr. Wheler for the photographs of the smaller parasite from which the accompanying illustrations are taken (Figs. 1 and 2). It is about three-sixteenths of an inch in length and the magnification of the photograph is slightly over × 6. The larger living specimen was more than double this size and broad and thick in proportion. In colour and general appearance its body resembled an unroasted coffee-bean. The smaller parasite, however, is best for purposes of identification and has been presented to the British Museum, which had, I understand, no similar specimen.

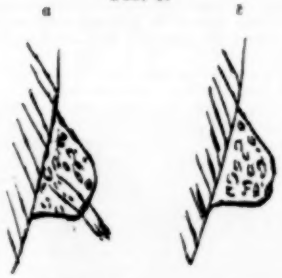
NOTE BY MR. WHELER ON A REMARKABLE STIGMATIC ORGAN IN THE NYMPH OF ORNITHODORUS (OR ARGAS) MÉGNINI (DUGÈS)

On my referring the above specimens to Professor Neumann of Toulouse he at once identified them as ornithodorus mégnini—a genus belonging to the argasidæ—but a careful examination showed a very remarkable difference from other members of that sub-family of ixodidæ, such as may make it appear that another of those extraordinary variations of type may have come to light that have already made the study of these parasites unusually interesting.

The feature referred to consists of two protuberances placed in the position of the stigmata, one on each side of the body. They are situated above instead of behind the fourth pair of legs and are therefore visible from the dorsal side of the tick. These are entirely different from the stigmal plates or peritremes usually present and consist of cone-like projections pointing backwards. The top is truncate and perforated with a large hole. Through this in the living specimen was to be seen a pointed organ, projected and withdrawn at will, and with considerable rapidity (Fig. 3) This organ only partially filled up the orifice; it was furnished with three hairs at the end. Its appearance was somewhat similar to the final joint of the palpi. I am unable to satisfy myself as to its probable use. This special characteristic may possibly be deemed sufficient to establish a new genus for this species, in which case the name given by Marx, under the erroneous impression that it was a new species—rhynonoprium spinosum—may be adopted as being more appropriate than the older name given by Dugès.

The species has other peculiarities. It is fully described by Neumann in his "Révision de la Famille des Ixodidæ," and he mentions the unusual fact that the nymph attains

FIG. 3.



a, organ protruded. *b*, organ retracted.

dimensions at least as great as the mature female and that it is in this state that it acquires the greater part of the reserves of blood which the latter utilise to form their eggs. He also states that so great a difference exists between the two states as to have caused Marx to believe them to be separate species. Neumann had not, however, noticed the stigmatic organ above mentioned. In general characteristics the species appears to be nearer allied to argas than to ornithodorus, but it seems probable that it should be relegated to a separate genus—a contention that may be strengthened by the fact that the first joints of all the legs are almost totally concealed beneath the cuticle of the body, but not having had an opportunity of examining an adult specimen I should be sorry to express any definite opinion on the subject.

It is interesting to note that Neumann's specimen came from a horse in Mexico, which strengthens the assumption that the present pair come from Arizona as described by the patient.

Cambridge.

A CASE OF BELLADONNA POISONING; MORPHIA USED AS AN ANTIDOTE.

BY PETER D. STRACHAN, M.A., M.B., CH.B. GLASG.

THE following case is of interest in that it affords an opportunity of estimating the tolerance of a child for belladonna and the efficiency of morphia as an antidote.

At 2.30 on the morning of March 7th, 1901, I was called to attend a boy, aged five years, alleged to have been accidentally poisoned by his mother. The parents' account was as follows. At 9.30 P.M. the mother gave the child a large tablespoonful of what she took to be syrup of senna. She then left home to nurse a sick relative and did not return till shortly before 2.30 A.M. About midnight the father, who slept with the boy, observed him to be breathing rapidly and was particularly alarmed at the loudness of the heart-sounds. He got up and took the boy out of bed and was still more alarmed to find that the child could not stand. Having been thus aroused the child became violently delirious, striking out with his fists, ticking, and biting on the slightest interference with his person. On being put back to bed he could scarcely be kept under the blankets on account of the violence of his movements. The father did his best to keep the boy quiet until the mother's return. When she saw the state of matters her suspicion of poisoning was aroused, and on examining the bottle from which she had given the dose she found it to be labeled "Poison." She therefore immediately sent for medical aid.

When I arrived I found the boy in the state described above. When left alone in bed he came out from under the blankets and wandered on hands and knees aimlessly about the bed, occasionally crying out. The delirium and violent movements were increased when efforts were made to control them. The movements were at no time convulsive. The face was flushed, not cyanosed. The pupils were widely dilated and failed to respond to light. The pulse and

respiration were strong and rapid and the heart sounds were very loud. The boy was unable to speak. I found the suspected bottles to contain glycerine of belladonna. I ascertained that the boy had not vomited. As the evidences of belladonna poisoning were undoubted I washed out the stomach with the syphon. A good deal of the water first introduced was vomited over the child's nightshirt, which was of a dark brown colour, so that it was difficult to tell from its appearance whether it contained belladonna extract or not. That which came through the syphon was clear. There was no odour of belladonna from the washings. Considering that five hours had elapsed since the poison was taken I deemed it highly improbable that any of it still remained in the stomach.

After completing the washing of the stomach I gave a hypodermic injection of a quarter grain of morphia sulphate and a tablespoonful of castor-oil by the mouth, which was swallowed. In a short time the boy became quiet and I left the house, having directed the parents to send for me should any further alarming symptoms arise.

I was unable to see the patient again until 11 A.M. Then I ascertained that he had slept well till 10, and on awaking still exhibited symptoms of the same kind, but less aggravated. The delirium was now of a hilarious character, somewhat resembling drunkenness. The child laughed and chatted about his school experiences, games, fights, &c. The bowels had not yet moved. I then gave another hypodermic injection of one quarter grain of morphia sulphate and three grains of calomel by the mouth. The boy did not again sleep till about 11 o'clock. During the whole of that day somebody had to remain constantly at the bedside to keep him in bed. Several times he attempted to bite those trying to control his movements. Although the mouth was very dry and the tongue was constantly rolled about the boy refused food or drink and spat out whatever was introduced into his mouth. At two in the afternoon, the bowels not having yet moved, the mother gave a small soap-and-water enema, after which there were three or four liquid motions. The boy continued in the same mental state till about 11 P.M., when he fell asleep. Shortly after 11 P.M. I visited the patient, and finding him sleeping tranquilly I judged it best to do nothing. He had a good night's rest. The following morning at 10 I found him awake and presenting no abnormal symptoms except dilatation of the pupils which persisted for four days. No rash at any time appeared upon the body and there was no peeling of the skin. After recovery the boy seemed to have no recollection of the incidents which occurred during his illness.

This case may be regarded as illustrating two points, the one necessarily inversely as the other: (1) the tolerance of the child for belladonna; and (2) the efficiency of morphia as an antidote. 1. The dose swallowed was certainly a large one. The chief alkaloid in belladonna is now believed to be hyoscyamine, not atropine. These alkaloids are isomeric and it is considered probable that atropine is a conversion product of hyoscyamine. Extract of belladonna is estimated to contain about 1 per cent. of alkaloid. The glycerine contains 50 per cent. of the extract. In this instance fully half an ounce of the glycerine or two drachms of the extract were taken, representing about one grain of alkaloid. The medicinal dose of both alkaloids is from $\frac{1}{100}$th grain to $\frac{1}{30}$th grain. The fact that the patient remained untreated for five hours without exhibiting the extreme symptoms of poisoning by the drug points to a remarkable tolerance. Taylor quotes as remarkable a case in which a woman recovered after swallowing three drachms of the extract; but although emetics were administered successfully she did not completely recover until five weeks had elapsed. In the case under discussion, when we consider the enormous dose and the great probability that it was all absorbed, it would seem that tolerance alone can hardly explain the speedy recovery. 2. It is here interesting to note that "the Edinburgh committee, presided over by Dr. Hughes Bennett, conclude: (1) that sulphate of atropia is, within a limited range, physiologically antagonistic to meconate of morphia; (2) that meconate of morphia does not act antidotally after a large dose of atropia, and thus, while atropia is an antidote to morphia, morphia is not an antidote to atropia." Physostigmine, in relation to atropine, is considered to have a wider range of antidotal action than morphia. "Although it is experimentally proved that atropine can avert death from physostigmine the question yet remains unsolved whether physostigmine can prevent death from atropine." The above two quotations from Ringer and Stinsbury make it appear that atropine is a good servant, but a bad master.

Those who advocate morphia as an antidote to atropine recommend a quarter of a grain of the former to one-thirtieth of a grain of the latter. It is conceivable that in the child, where there is tolerance of the one and intolerance of the other, the proportion of morphia to atropine ought to be much less. In the light of the more modern view that hyoscyamine is the chief alkaloid in belladonna, these conclusions regarding atropine are irrelevant where belladonna is the poison under consideration, unless we assume that atropine and hyoscyamine have identical physiological action. Such an assumption stands in need of investigation, as indeed does the whole subject, for the opinions to be found in our text-books as to the alkaloids of belladonna and hyoscyamus, their antidotes, and their posology are very conflicting. The fact that in this case such large doses of morphia produced in the child so little of the usual effects of the drug is not so significant as it would at first sight appear, for it merely confirms, what is generally admitted, that belladonna antagonises morphia. The case for the converse proposition must rest entirely upon the non-appearance of the gravest symptoms of belladonna poisoning and the rapid recovery from those symptoms which did appear.

Auchinleck, Ayrshire.

DERMATITIS FROM ARSENIC IN STOCKINGS.

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AND
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THAT dyed materials when brought into contact with the skin may give rise to local irritation, occasionally culminating in actual dermatitis, has long been known to dermatologists. From the many cases available for quotation we need only refer here to those recorded in THE LANCET by Mr. Henry Lee.[1] In the early period of aniline dye manufacture the effect of dyed stockings in this direction was easily traceable to the large percentage of arsenic acid used in the preparation of these dyes (fuchsine red, &c.). That the external application of arsenic is productive of severe and even fatal poisoning is well established, as may be seen upon reference to the text-books of toxicology. These considerations, confirmed by many other observations, resulted in Germany in the passing of a law prohibiting the use of any dye stuff containing arsenic for the purpose of colouring food, wearing apparel, or domestic objects.[2] Since the passing of this law practically all the aniline colours placed on the market have been free from arsenic. A knowledge of these facts rendered the etiology of the following cases which have recently been brought under our notice at first sight somewhat obscure. We were, however, able clearly to trace them to the presence of arsenic in the stockings worn.

Before entering into the subject further, we think it best to give a short description of the cases in question. For the medical notes of the first case we are indebted to Dr. J. Cohn.

CASE 1.—"A boy, nine years old, complained on March 3rd last of pain in the right leg. Examination showed the presence of an inflammatory nodule of about the size of a walnut, situated at the junction of the upper with the middle third of the calf. The nodule was regarded as being probably a commencing furuncle, and sedative lotions and compresses were applied. Upon seeing the patient on the next morning each leg was found to be covered with from 10 to 12 nodules. The nodules were the same as the one observed on the previous day, except somewhat smaller, and were situated between the foot and the knee, stopping abruptly short where the stockings ceased to be in contact with the skin. This directed my attention to the stockings and upon inquiry it was found that the boy had put on a

[1] THE LANCET, June 14th 1879, p. 856.

[2] Sell: Arbeiten aus dem Deutschen Kaiserlichen Gesundheitsamt, 1887; Erläuterungen zu dem Gesetzentwurf, &c.

new pair of stockings on the same morning as the first nodule appeared. In the evening of the same day (viz., the second day of the affection) the boy was again seen. He was restless and since the last visit had vomited, without any apparent cause. His condition, however, did not seem serious, the temperature being normal and the pulse only slightly accelerated. There was no diarrhœa. The case caused no further anxiety but necessitated the boy being kept in bed for three days. The nodules gradually faded and on the fifth day the boy went out. On this day he was able to put on his stockings and wore one of his old pairs. On the eighth day, however, he put on the same stockings that seemed to have been the cause of the original irritation. They had been carefully washed in the meantime with soda. On the evening of the same day another crop of nodules appeared which faded in the course of a few days under similar treatment and the entire discarding of the stockings in question."

CASE 2.—This case, which was much less severe, may be described as follows. The patient, a female, noticed a marked tenderness of the feet, especially the soles, after wearing for a few hours a pair of new black stockings. Although no gross local inflammation was produced the pain upon pressure was so intense that she could not stand or walk upon her feet. The stockings were discarded and the symptoms disappeared. A few days afterwards the same stockings, which had been washed in the meantime, were again worn with a recurrence of the symptoms, these latter again disappearing upon leaving off the stockings.

The clinical history of these cases suggests strongly the presence of some chemical irritant in the stockings. In Case 1 we were able to obtain for chemical examination (1) a pair of new stockings identical with those the wearing of which was followed by the dermatitis; and (2) the stockings actually worn by the boy after they had been twice washed. In Case 2 we obtained an unworn pair of stockings from the same lot as those which had caused the trouble. The stockings of the patient in Case 1 were long, black, machine-made woollen stockings, weighing 120 grammes; a piece of 100 square centimetres weighed five grammes. The colouring matter proved on examination to be a chrome black. The ash contained chromium and the material gave the reactions of logwood. Probably some other yellow colouring matter (fustic, &c.) was present. On further examination it was found that the stockings contained a considerable quantity of arsenic. Ten grammes treated by Reinsch's method gave a copious sublimate of large white arsenic crystals, and the residual liquid when submitted to Marsh's test gave still a strong black arsenical mirror. A further important result of the qualitative examination was that some of the arsenic was found to be present in a soluble form, since an aqueous extract of the stockings made at the temperature of the water bath, and subsequently subjected to Marsh's test, gave a strong arsenical mirror. In the case of these stockings we estimated the total amount of arsenic and also the amount soluble in water. These estimations were made by distilling with sulphate of iron and ammonia in a hydrochloric acid current,[3] and final weighing as pyro-magnesium-arsenate. It was found that one pair of stockings contained as much as 75 milligrammes, or 1·2 grains, of arsenic (As_2O_5); of this 10·5 milligrammes, or one-sixth of a grain, were soluble in water. A piece having an area of 100 square centimetres contained 3·1 milligrammes of As_2O_5. It was further found that the stockings which had been washed twice still contained some soluble arsenic, the watery extract giving a distinct arsenical mirror. After the stockings had been completely extracted with distilled water they still contained 64 milligrammes of As_2O_5. The stockings of the patient in Case 2 were only examined qualitatively. The mirrors obtained from both the stockings themselves and the aqueous extract of them were approximately of the same intensity as those derived under similar conditions from the new stockings of the patient in Case 1.

From the above results we think that the previously obscure etiology of these two skin affections is cleared up and that we may regard them as being caused by the arsenic contained in the stockings, and probably by the soluble moiety. The ordinary stockings worn by the boy in Case 1 in the time between the two attacks were found to be free from arsenic. It must, of course, be remembered in this connexion that the term "soluble" and "insoluble" with regard to the arsenic content of the stockings is only relative, in that the stockings while being worn would be subjected to the action of an acid secretion—namely, the sweat—by the agency of which some of the insoluble arsenical compounds might be rendered soluble. The fact that the amount of sweat secreted, especially by the feet, is very considerable, is shown by the researches of Cramer,[4] who found that socks in a given time absorbed their own weight of sweat. In this case the conclusion that some arsenic was absorbed through the skin seems justified, in that we must regard the vomiting as produced by the excretion by the stomach of arsenic absorbed by the skin. This same phenomenon has been recorded by other observers.

We have heard incidentally of other cases of dermatitis which, in the light of our present knowledge, we should regard as having a similar etiology to the above. Unfortunately these have not been observed with sufficient exactitude, nor was the material in question available for chemical examination. The indications, however, were sufficient to induce us to examine this matter further, with the view of ascertaining to what extent ordinary dyed goods contained arsenic.

We first examined three samples of black woollen stockings purchased at various prices in different parts of London, all emanating from the same wholesale firm and from the one which supplied the original stockings worn by the patient in Case 1. They all contained arsenic, but apparently in smaller amount than the stockings productive of the dermatitis. We next obtained one sample from each of four other makers, and we found that arsenic was present in each case to a larger or a smaller degree. Three samples of "tan" mixed wool and silk socks were contaminated as well. We examined also a pair of ordinary woollen gloves and found them to be arsenicated. This had especial interest in view of the case quoted by Sell[5] in which a severe dermatitis of the hands was produced by the wearing of a pair of marine-blue gloves. A sample of black loose wool was found to be free from arsenic.

Upon inquiring into the source of the arsenic in the goods examined by us we found that arsenic in various forms is used in the process of dyeing. In the standard work on dyeing by Knecht and Rawson[6] it is stated that a solution of white arsenic in acetic acid to which some glycerine has been added is used and called "purple fixing colour." The authors also say[7] that "sodium arseniate is extensively used as a fixing agent for mordants. In yarn dyeing it affects the hands of the workmen owing to its poisonous properties. As it is so dangerous ..... its use is objectionable." Another possible source, although more unlikely, would be the use of highly arsenicated sulphuric acid in the preparation of the chromic acid mordant bath.

The use of arsenical mordants has been recognised to some extent by the German law quoted above. Their use is allowed upon two conditions—namely, that no *soluble* compound of arsenic be present in the finished article, and that the total quantity of arsenic be always less than two milligrammes per 100 square centimetres.[8] A similar law exists in Austria. In Sweden the law is much more stringent. The materials used for the manufacture of wearing apparel, &c., must not contain arsenic to such an extent as to allow 100 square centimetres of the finished article to produce when treated according to a certain test an opaque arsenical mirror. The maximum limit, according to this test, corresponds to about 0·07 milligramme per 100 square centimetres.

It will be seen that the stockings which caused the dermatitis in our two cases contained arsenic considerably in excess of the amount allowed by the above-named countries, and although no doubt individuals differ largely *inter se* with regard to their sensitiveness to arsenic it would seem that if arsenical mordants cannot be dispensed with, their use should at least be supervised. The presence of soluble arsenical compounds in those materials which come into intimate contact with the skin can certainly be avoided, and should be prohibited.

[3] Compare Classen and Ludwig: Bericht der Deutschen Chemischen Gesellschaft, Band xviii., p. 1110.

[4] Quoted from Prausnitz: Grundzüge der Hygiene, München, 1899, p. 141.

[5] Loc. cit.

[6] Manual of Dyeing, p. 276.

[7] Ibid., p. 195.

[8] In this connexion it is interesting to know that a pair of black silk socks and a pair of yellow stockings obtained from Germany were found to be free from arsenic.

TETANUS PUERPERALIS.

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THE rarity of this terrible and almost fatal complication of the puerperal state warrants publication of the following successful case. Tetanus is known almost from time immemorial, and has been studied by scientific men of all ages; but it is only since the discovery of the specific bacillus by Nicolaier in 1884 that its study has received a scientific foundation. At the present day we must define tetanus as "an acute infectious disease which is invariably and indubitably caused by the entrance into the system of the specific micro-organism—the bacillus tetani of Nicolaier and first cultivated in pure culture by Kitasato in 1891 in anaerobic medium." In the present light of bacteriology and animal experiments there is certainly no place in the description of a given case of tetanus for the diagnosis "idiopathic" or "rheumatic." The only interpretation that can be put is that in these cases the point of infection has not been well searched for or found. The so-called varieties only indicate the seat of infection, the "puerperal" variety thus indicating that a breach in the parturient tract is the point of infection.

A Hindu female, aged 28 years, was delivered of a full-term child on July 20th, 1900. The child had trismus neonatorum on the tenth day and died within 24 hours. The mother had lock-jaw and stiffness of the neck since July 30th. She was admitted into the Campbell Hospital, Calcutta, on August 3rd, 1900, when she had well-marked symptoms of tetanus—opisthotonos, jaw completely locked, spasms very frequent, constipation, pulse 120, small, and compressible, and temperature 100·2° F. She was at once given an intra-uterine douche of perchloride of mercury lotion (1 in 2000), an ordinary soap-and-water enema, followed by an enema of 40 grains of chloral hydrate and five grains of calomel on the tongue. She was subsequently kept under the influence of chloral, the drug being given per mouth or rectum. Occasionally she had to be given very large doses of it and during one night she had three enemata of 40 grains each. During the course of the illness she was given apomorphia four or five times hypodermically in addition to chloral per rectum when she could not take medicine by the mouth. I also had recourse to intra-cellular injection of normal saline solution (under the breasts) several times during the course of the illness with a view to help elimination of the toxins. The spasms did not completely abate till Sept. 18th—i.e., six weeks after admission. The bowels were kept well open. Plenty of liquid food was given regularly. The total quantity of chloral used was eight ounces, six drachms, and ten grains. She had in addition as much bromide of potassium and a quantity of tincture of Indian hemp.

The prognosis is very grave. The average mortality of tetanus, taking all the so-called varieties together (as given in English text-books), is between 80 and 90 per cent. Garrigues has collected 57 cases of puerperal tetanus and the mortality is put down between 84 and 92 per cent. (*vide American Journal of Obstetrics*, 1882). I have been able to collect 68 cases from literature, a tabulated list of which is given below. In compiling this I have excluded all cases in which there has been any doubt with regard to diagnosis. Of these 68 cases only five patients recovered, giving a mortality of 92 per cent. The cases can be subdivided into three groups. In the first group (i.e., Cases 1 to 43) we have cases collected from English text-books and periodicals. Of the 43 cases three patients recovered, or a mortality of 93 per cent. In the second group (i.e., Cases 44 to 64) we have cases treated with antitoxin given either subcutaneously or by intra-cerebral injection. Of these 21 cases one patient only recovered (treated with intra-cerebral injection + chloral + morphia), or a mortality of 95 per cent. In the third group (i.e., Cases 65 to 68) we have Indian cases collected from the *Indian Medical Gazette* of the last 35 years. Only four cases of unmistakeable puerperal tetanus have been found, with one recovery, or a mortality of 75 per cent. It may thus be seen that even with the best modern treatment the mortality of puerperal tetanus is appalling. It must, however, be remarked that the Indian cases seem to yield to treatment better than the other cases.

With regard to rational treatment of this affection we

List of Cases Collected from Medical Literature.

No.	Reporter's name.	Abortion; premature labour; or labour at term.	Number of days after which symptoms appeared.	Duration of disease in days.	Result.	Treatment.
1	Dr. Alexander Wood.	Abortion.	6	3	D.	Turpentine, tobacco, Indian hemp, &c.
2	Dr. Malcolm.	,,	15	3	D.	—
3	Dr. Hislop.	,,	6	3	D.	Opiates and croton oil.
4	Dr. Symonds.	,,	7	3	D.	—
5	Dr. Velpeau.	,,	?	?	D.	—
6	Dr. Ritchie.	,,	11	6	D.	Laudanum and croton oil.
7	Dr. Adams.	,,	7	3	D.	—
8	Dr. Lyell.	Labour.	5	5	D.	Opiates; venesection; turpentine.
9	Dr. Lever.	,,	3	3	D.	Opiates; venesection; turpentine.
10	Dr. Mackinlay.	,,	30	3	D.	Secondary hæmorrhage 24 days after labour.
11	Dr. Storer.	,,	6	2	D.	—
12	Dr. Aubinais.	,,	3	7	D.	—
13	,,	,,	4	—	R.	Bled six times; 100 leeches; musk, valerian.
14	,,	Premature labour.	4	40	R.	—
15	Mr. Colles.	Labour.	15	2	D.	—
16	Dr. Christie.	,,	2	—	D.	Hg. opium, warm bath.
17	Mr. Dickinson.	,,	—	5	D.	Hg. opium, warm bath.
18	—	,,	5	1	D.	Cæsarean section.
19	Professor Dubois.	,,	13	3	D.	—
20	Professor Lawrie.	Abortion.	10	?	D.	$CHCl_3$.
21	Dr. Blacksham.	,,	9	5	D.	—
22	Dr. Philipson.	Labour.	9	5	D.	—
23	Dr. Denham.	Abortion.	—	—	D.	—
24	,,	,,	—	—	D.	—
25	,,	,,	—	—	D.	—
26	,,	Labour.	—	—	D.	—
27	Dr. Keeling.	,,	10	8	D.	—
28	Dr. Wiltshire.	Abortion.	—	—	D.	—
29	,,	,,	—	—	D.	—
30	Dr. Bennington.	Labour.	6	1	D.	—
31	Dr. Dill.	Abortion.	10	72	R.	—
32	Dr. McLaren.	,,	10	4	D.	Laudanum blister to spine.
33	Dr. McGregor.	,,	7	1	D.	—
34	Dr. Gordon.	,,	9	8	D.	Mustard poultices, opium, and calomel.
35	,,	,,	4	1	D.	Dover's powder, calomel, tobacco.
36	,,	,,	5	8	D.	Belladonna and lobelia.
37	Dr. Craig.	Labour.	9	2	D.	Tincture of Indian hemp.
38	Dr. Arnold.	Abortion.	11	—	D.	—
39	Dr. Werner.	,,	—	—	D.	—
40	,,	Labour.	—	—	D.	—
41	Dr. Viant.	,,	5	2	D.	$CHCl_3$. Castor oil, and opium.
42	Dr. Netzel.	,,	7	1	D.	Chloral morphia.
43	Mr. Peacock.	,,	7	4	D.	,,
44	Dr. Walko.	,,	9	—	D.	Antitoxin.
45	Dr. McEwan.	Abortion.	7	—	D.	Antitoxin and chloral.
46	Dr. Blumenthal.	Labour.	7	—	D.	Antitoxin and chloral.

List of Cases collected from Medical Literature (continued).

No.	Reporter's name.	Abortion; premature labour; or labour at term.	Number of days after which symptoms appeared.	Duration of disease in days.	Result.	Treatment.
47	Dr. Merkel.	Abortion.	—	—	D.	Antitoxin.
48	,,	,,	—	—	D.	,,
49	Dr. Rubeska.	,,	9	9	D.	,,
50	,,	Labour.	19	—	D.	,,
51	Dr. Pitha.	,,	8	—	D.	Antitoxin, chloral, and anæsthesia.
52	,,	,,	8	—	D.	Antitoxin, chloral, and anæsthesia.
53	,,	,,	8	—	D.	Antitoxin.
54	,,	,,	8	—	D.	,,
55	,,	,,	6	—	D.	,,
56	Dr. Kraus.	,,	7	—	D.	Antitoxin, urethane, and morphine.
57	,,	,,	9	—	D.	Antitoxin.
58	,,	,,	6	—	D.	Antitoxin and urethane.
59	,,	,,	10	—	D.	Antitoxin and urethane.
60	Dr. Leyden.	,,	10	—	R.	Antitoxin (intra-cerebral), chloral, and morphia.
61	Dr. Pitha.	,,	5	—	D.	Antitoxin (intra-cerebral) and morphia.
62	,,	Abortion.	9	—	D.	Antitoxin (intra-cerebral) and morphia.
63	,,	Labour.	9	—	D.	Antitoxin (intra-cerebral) and morphia.
64	,,	,,	5	—	D.	Antitoxin (intra-cerebral), morphia, and chloral.
65	Dr. R. N. Roy.	Abortion.	6	3	D.	—
66	,,	Labour.	4	1	D.	—
67	Dr. Mallik.	,,	15	—	R.	Chloral, 13½ drachms.
68	Dr. Mootoo-samy.	,,	5	4	D.	—

References.—1, 2, Edinburgh Monthly Journal, April, 1850. 3, 4, Selected Obstetrical Works, Simpson, 1871, p. 573. 5, Essay on Puerperal Convulsion, p. 232. 6, 7, 8, 9, 10, Selected Obstetrical Works, Simpson, 1871, pp. 574-578. 11, American Journal of the Medical Sciences, January, 1842. 12, 13, 14, British and Foreign Medical Science. 15, Dublin Quarterly Journal, vol. xxx., p. 288. 16, Edinburgh Medical and Surgical Journal, vol. viii., p. 415. 17, London Medical Repository, vol. i., p. 192. 18, THE LANCET, vol. i., 1838, p. 388. 19, THE LANCET, vol. i., 1840. 20, Selected Obstetrical Works, Simpson, p. 580. 21, 22, Brit. Med. Jour., 1865. 23, 24, 25, 26, Dublin Quarterly, 1865. 27, Brit. Med Jour., vol. i., p. 113. 28, 29, Obstetrical Transactions, vol. xiii. 30, British Gynæcological Journal, vol. i., p. 159. 31, Brit. Med. Jour., Oct. 7th, 1883. 32, Edinburgh Medical Journal, August, 1862. 33, Ibid., July, 1864. 34, 35, 36, American Journal of the Medical Sciences, January, 1868. 37, Ranking's Abstracts, vol. i. (1873). 38, 39, 40, London Medical Record, April, 1885. 41, 42, THE LANCET, July 31st, 1886, p. 218. 43, THE LANCET, August 17th, 1889, p. 313. 44, Annals of Surgery, August, 1900. 45, THE LANCET, August 8th, 1896, p. 381. 46-59, Annals of Surgery, September, 1900. 60-64, Ibid., October, 1900. 65, 66, Indian Medical Gazette, 1874, p. 182. 67, Ibid., 1877, p. 70. 68, Ibid., 1877, p. 290.

must look to the following points: (1) to destroy the bacteria at the seat of infection by thoroughly anti-septicising the parturient canal and by subsequently keeping it aseptic; (2) to eliminate the toxins already absorbed by brisk purgation and intra-cellular injection (under the breasts) of normal saline solution; (3) to overcome the symptoms induced by the action of toxins—viz., the increased reflex irritability of the higher nerve centres—and this is best accomplished by keeping the patient absolutely quiet in an isolated place and by chloral in very big doses, given either per os if possible, per anum, or hypodermic injection of apomorphia, hyoscine hydrobromate, or morphia; and (4) to neutralise the poison already absorbed and to immunise the body after local infection has taken place. Both of these indications ought theoretically to be met by the injection of the serum of immunised animals. But the mode of action of the antitoxin has not yet been acceptably explained. Moschcowitz, in his masterly contribution on the antitoxin treatment of tetanus, published in the Annals of Surgery of August, September, and October, 1900, gives no very decided opinion with regard to the neutralising effect of antitoxin, after a careful analysis of 358 cases. Antitoxin treatment, he says, appears to have a distinctly beneficial influence on the course of tetanus and the statistics he has collected show that with this treatment the general mortality of tetanus has been reduced from 90 to 40 per cent. But the puerperal cases, taken separately, show no improvement in the percentage of recoveries. With regard to the question of immunising the body after local infection has taken place, this would involve the injection of antitoxin as a prophylactic measure in all wounds when there is reason to suspect the possibility of the subsequent development of tetanus. By such treatment it is asserted that an extensive epidemic of puerperal tetanus in a lying-in hospital at Prague was cut short and numerous instances of good results from a similar course have been recorded in veterinary practice.

Calcutta.

MERCURY AND IODIDE OF POTASSIUM INTERNALLY GIVEN WITH PILOCARPINE HYPODERMICALLY IN DISEASE OF THE EYES.[1]

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CASE 1.—In August, 1899, a patient consulted me regarding an inflamed condition of the right eye. I found at the upper and inner part of the eyeball in the ciliary region very severe scleritis, limited, and the patch of exudation large, swollen, and deeply congested. The adjacent cornea was infiltrated with a cloudy opacity up to, and slightly beyond, the pupillary margin, and there were much pain, photophobia, &c. I gave for ten days mercury and iodide of potassium and used atropine locally. The severity of the symptoms was relieved, but the progress of the sclero-keratitis was not stayed.

Early in September, 1899, I began treatment. The scleritis was now more extensive and the cornea was infiltrated almost throughout its whole extent. I gave pilocarpine daily in doses of one-sixth of a grain for two weeks, and then at intervals of from four to six weeks for seven injections, one each day, and have so continued up to the time of writing. The iodide of potassium and mercury have also been continuously used. The scleritis has traversed the whole ciliary zone up to the point of beginning, but under most favourable conditions—that is, the part first affected has been the most severely attacked and every adjoining part taken in was less severe, till finally, when the disease came again to the inner canthus, it was merely a blush. Moreover, the previously affected parts have kept improving and have never relapsed. In January, 1900, the sclero-keratitis was cured, but there was left a decided corneal haze, interfering very much with vision so that nothing could be read at 20 feet. The treatment was no longer necessary in regard to the scleritis, but it had to be kept up so as to clear up the cornea and thus to restore normal vision. This is being done, and now the vision is $\frac{1}{15}$. The cornea is still clearing up and I fully expect almost or quite normal vision again. There has never been any sign of a return of the disease, and the appearance of the formerly severely inflamed sclera is now normal.

The prognosis regarding this form of sclero-keratitis is gloomy. It is stated in our best text-books that the treatment is at best but palliative; the disease is certain to relapse and continues in this way for years till finally vision is not only impaired or practically lost, but ciliary bulging

[1] A paper read at the thirty-third annual meeting of the Canadian Medical Association held at Ottawa on Sept. 12th, 13th, and 14th, 1900.

takes place, leading to marked staphylomatous changes. Under the combined treatment of mercury and iodide of potassium internally and pilocarpine hypodermically there need be, I think, no such result, but a permanent curative effect may be secured. The patient's history is tuberculous.

CASE 2.—The other case is that of a boy, aged 12 years, suffering from acute sympathetic ophthalmia—that is, a very severe cyclo-irido-keratitis. When the sympathetic trouble, which showed itself rapidly, was first noticed, the other eye, which had been injured by a penetrating wound, extending well up into the cornea from just at the ciliary region, was excised, the date being Jan. 25th, 1900. Under atropine the pupil at once became fully dilated. Mercury and iodide of potassium were given and the eye at first improved. On Feb. 2nd, eight days after the excision, the sympathetic inflammation again plainly showed itself. I now began combined treatment. For the first 12 injections of pilocarpine, that is the first two weeks, the effect was not full, though I gave as much as one-sixth of a grain. I felt that there was some reason for this, for one sixth of a grain is a very large dose for a boy 12 years old. The throat was very slightly affected by the atropine and apparently there was no noticeable constitutional effect. However, I stopped, by more careful pressure upon the canaliculi, all passage of it into the throat when one-tenth of a grain gave a full effect. The pupil was now, at the end of three weeks only, dilated one-third, the exudation into the ciliary region and iris tissue causing the narrowing to take place. The pupillary margin was very firmly bound down and the capsule of the lens in the pupillary area was covered with a semi-translucent coating of lymph. On the 24th, four weeks since the excision and about three weeks since the beginning of the combined treatment, another acute attack came on and the condition was as follows. There was much general infection, the tension was +1, there was severe pain, and keratitis punctata was present throughout the whole cornea—in fact, a well-developed case of sympathetic cyclo-irido-keratitis; there was perception of light only. Under the usual prognosis with respect to similar cases there was a very hopeless outlook. On the 27th the eye was quieter; the tension was +. On March 20th the eye was still improving and vision was better. The combined treatment was still kept up and the eye kept doing well till the 23rd when there occurred a very acute exacerbation with severe pain; the tension was + 1 and there was perception of light only. On the 31st the eye was better. Between this date and the beginning of September the combined treatment was kept up. An improvement which was most uniform, thorough, and unbroken by any symptoms of relapse resulted. The sight also gradually improved till now (Sept. 6th, 1900) the vision is $\frac{1}{12}$ less two letters. The absorption has continued very satisfactorily so that the pupillary margin has given way throughout almost its whole extent. The pupil, however, is dilating very slowly, due to the exudation into the iris tissue. This absorptive process I confidently believe will continue till finally the whole of the affected region will again be restored to a healthy condition. The tension is now normal. This is the first case of acute sympathetic ophthalmia which I have had the opportunity of treating in this way, and the results at the end of about eight months fully convince me that the result will be for all practical ends an eye normal as regards vision and its general condition. This boy has taken internally ever since Feb. 2nd, 1900, five grains of iodide of potassium thrice daily after eating and the twenty-fourth of a grain of bichloride of mercury before eating. One-tenth of a grain of pilocarpine was given hypodermically every second day after the first two weeks for five months continuously. During the remainder of the eight months at the end of every two weeks I have given an injection every second day for six injections and am still going on with them. His general health is good.

Other cases previously published by me,[2] added to those now given and also many minor ones not reported, have given results better than those obtained by other treatment, so that I feel justified in advocating the superiority of the combined form of treatment. During four years as resident house surgeon at Moorfields Eye Hospital I saw a good many cases of sympathetic ophthalmia, and I am persuaded that under any other treatment the result in Case 2 would have been that, under the best of circumstances, the eye would have been greatly impaired. The treatment may be said to owe its efficacy to its power of arousing to excessive activity, in a vigorous and sustained manner, the normal physiological processes in diseased tissues, and thus acting so in accord with the efforts of nature as to bring about a restoration to a normal condition. I am now using this treatment, in this belief, in a case of double conical cornea with so far very encouraging progress.

Toronto.

[2] Archives of Ophthalmology and Ophthalmic Review.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF INFLAMED CYSTIC OVARY WITH PELVIC CELLULITIS AND PERITONITIS WITH DEVELOPMENT OF SEPTICÆMIA SUCCESSFULLY TREATED WITH ANTI-STREPTOCOCCIC SERUM.

(Under the care of Dr. W. W. H. TATE.)

IN the following case the evidence of the value of anti-streptococcic serum is very strong, in spite of the fact that the patient refused to allow the blood to be examined bacteriologically. Even, however, if the patient will not permit an examination of the blood, much information may be obtained from a bacteriological examination of the uterine cavity. W. Williams[1] examined 44 cases of puerperal fever and streptococci were found in only eight of these. Most observers are agreed that the evidence is against anti-streptococcic serum being of much value except in isolated cases, yet as the injection very rarely appears to be in any way harmful it would be well to give the serum an extensive trial, a bacteriological examination of the blood being made whenever possible. For the notes of the case we are indebted to Mr. Hanway R. Beale, senior obstetric house physician.

A married woman, aged 37 years, was admitted into St. Thomas's Hospital on Oct. 13th, 1900, under the care of Dr. Tate. The patient had had 10 children and no definite miscarriages; her last child was born three years ago; the confinements had been normal. The present illness began in July, 1899, three weeks after a menstrual period, when the patient had a sudden flooding after lifting a tub; she supposed that she lost three pints of blood. The vagina was plugged, but the hæmorrhage persisted for three weeks, when some operation was performed at a cottage hospital where she stayed one month. The patient thought that she was pregnant at the time. On Oct. 4th there occurred a discharge of blood and yellow matter of offensive odour, and in November a second operation was performed similar to the previous one. At this time there was also frequent and painful micturition. The operation was followed by a high temperature and severe abdominal pain lasting six weeks; in December the uterus was curetted, and two weeks later a perineal abscess was opened. After this she was well until June, but she did not menstruate during this period. Menstruation commenced after one week's severe abdominal pain. In July a lump was noticed in her right side but operation was not deemed necessary. In September frequency and pain on micturition became continuous and pain in the lower part of the abdomen was worse. She was seen by Dr. B. H. Kingsford of Woking, who diagnosed pelvic cellulitis and sent her to St. Thomas's Hospital.

On admission into St. Thomas's Hospital she was found to be of cachectic appearance and complained of great pain in the lower part of the abdomen and pain and frequency of micturition. There were great tenderness just above the symphysis pubis and a sense of fulness and great tenderness about the right flank, and there was a resistant tender

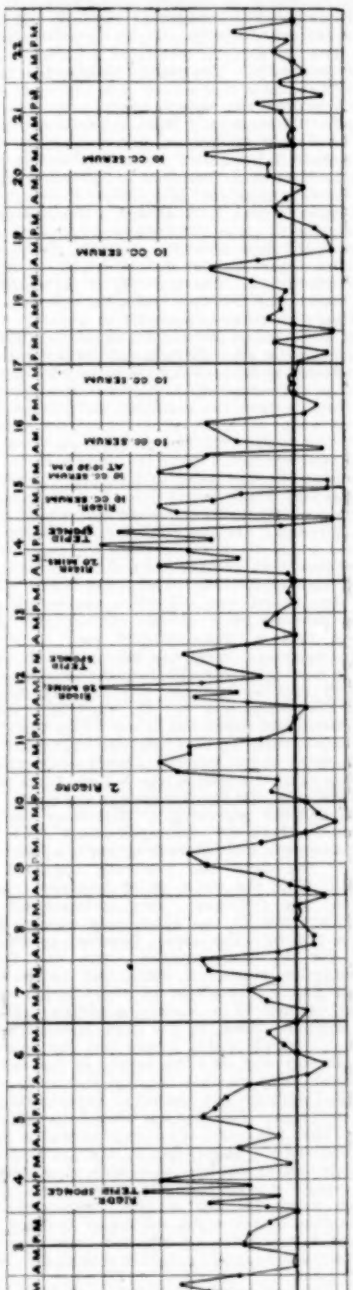
[1] American Journal of Obstetrics, September, 1898.

tumour of about the size of a tennis-ball in the hypogastrium just to the right of the mid-line. Owing to the tenderness she was examined under an anæsthetic by Dr. Tate and the condition found per vaginam was as follows. The cervix uteri was directed backwards. The external os was patulous and the lips were rather œdematous. The body of the uterus was fixed and appeared to be in the middle line. On the right side of the uterus there was a hard cartilaginous mass extending outwards to the pelvic walls and reaching just above the brim of the pelvis, evidently the result of cellulitis. The mass extended forwards into the anterior quarter of the pelvis and apparently into the cellular tissue between the cervix and bladder. On the left side there was a smaller swelling extending backwards from the side of the uterus to the lateral pelvic wall and quite fixed. The anterior vaginal roof was found to be slightly depressed and to have a boggy feeling. Nothing abnormal was found in the heart and lungs. The urine was alkaline and contained pus and traces of albumin. There was no sugar. The specific gravity was 1024 (catheter specimen). The tongue was slightly furred.

From Oct. 13th to Nov. 6th the patient was kept quiet in bed, during which time she suffered a good deal from pain in the lower part of the abdomen, this at times being very severe. Micturition was frequent and painful. The temperature during this period varied from 98·8° to 100·6° F., once reaching 102°. As it was thought possible that there was a collection of pus in the cellular tissue between the cervix and the bladder ether was administered and a further examination was made, when it was found that the mass previously felt on the right side of the uterus had diminished in size slightly but was still of a cartilaginous consistence and was immoveable. On the left side there was now only a slight thickening in the situation of the broad ligament which was slightly moveable up and down. Anteriorly a swelling could be felt in the situation of the bladder causing some bulging of the anterior vaginal wall and probably the result of cellulitic thickening about the wall of the bladder.

By the introduction of a sound the uterus was shown to be slightly retroverted. Adherent to, and above the level of, the fundus there was a rounded swelling of about the size of a cricket-ball and having the consistency of a sub-involuted uterus but apparently moveable to a slight extent on the anterior surface of the uterus. The sound did not appear to enter this mass. The cervix uteri having been drawn down by means of a volsellum, an incision was made with scissors through the mucous membrane of the vaginal fornix just above the cervix. The finger was then inserted through the incision into the cellular tissue between the uterus and the bladder in order to give an easy exit to any pus which might be present. None was evacuated and the opening made was plugged with iodoform gauze. The temperature fell after this but rose again next day and continued to vary from 99° to 101° and 100·6°. A rigor occurred on Nov. 9th, and the patient had a good deal of pain in the lower part of the abdomen. As she had not improved with rest and it was considered that the inflammatory mischief justified interference it was decided to make an exploratory laparotomy.

The operation was performed on Nov. 15th. On opening the abdomen evidence was found of considerable pelvic cellulitis and peritonitis. The uterus had been drawn down to the left side and fixed. The left ovary and tube were healthy; the right tube, although thickened and the fimbriæ œdematous, was also healthy. In the situation of the right ovary there was a spherical tumour of the size of a tennis ball and entirely covered by peritoneum except at its attachment to the broad ligament which was continued for a considerable distance down the pelvis and was flattened from side to side. As there did not seem to be sufficient disease in the abdomen to account for the patient's condition a further examination was made of the parts in front of the uterus by the combined abdominal and vaginal method and with the assistance of the bladder sound a swelling was now localised between the cervix and the bladder evidently containing pus. The abdominal opening was now temporarily closed with sterilised gauze and a bistoury was introduced through the old scar in the vagina and a deep incision was made through its anterior wall just below the fornix, giving exit to about two ounces of creamy, non-offensive pus. The abscess cavity and the vagina were irrigated with sterilised water and were plugged with iodoform gauze. The operators having been re-sterilised and the instruments changed the abdominal operation was



resumed and the ovarian tumour was removed. As there was persistent slight hæmorrhage from the œdematous tissues a thin gauze plug was inserted and the wound was closed. Examination of the parts removed showed that the tumour consisted of an outer soft œdematous ovary containing numerous Graafian follicles and an internal cyst which was easily enucleated and on incision was found to contain sanious fluid in which floated masses of pale translucent lymph; its walls were a quarter of an inch thick and were coated with inflammatory lymph.

From Nov. 16th to the 22nd good progress was made; the stitches were removed on the 22nd, the wound looking clean and there being apparently good union. On the 24th there was much abdominal pain and an area of dulness was found over a slight swelling in the lower part of the abdomen behind the wound. Fluctuation and great tenderness were found over it. On the 26th these had increased and the temperature had risen to 100·4° every day since the 23rd. Accordingly an incision was made in the swelling under nitrous oxide gas and 14 ounces of creamy inodorous pus were evacuated, and a drainage tube having been inserted the wound was dressed with hot boric acid lint. This was followed by a fall in the temperature and by general improvement until the 30th, when the tube was discarded, there being very little discharge. In the evening of this day there was a rigor and the temperature rose to 102° and continued to be remittent, as can be seen from the chart. Tepid sponging was ordered whenever the temperature arose above 103·4°. A second rigor occurred at 5 A.M. on Dec. 4th, on which date the abdomen was quite flaccid and there was no indication of pus anywhere. The urine was neutral, of specific gravity 1012, and contained no albumin, pus, or sugar. Further rigors occurred on the night of the 10th and on the 11th. The blood count showed that the red cells numbered 4,800,000 per cubic millimetre and the white cells 57,600. Nothing abnormal was detected on examination of the heart and lungs; the pulse was 108, full, and of low tension. Per vaginam there was felt a hard mass on the right side in the situation of the broad ligament passing backwards in the pelvis to the utero-sacral ligament. There was a smaller mass in the left broad ligament. The uterus was fixed. By abdomen the spleen was felt to be enlarged. Another rigor occurred on the 12th with a rise of the temperature to 105°. Examination of the heart revealed a soft blowing systolic murmur at the apex and a slight friction sound just after systole over the sternum at the level of the fourth rib. There was no increase in the pericardial dulness. The spleen was felt one inch below the costal margin. Pain was felt in the right shoulder and sterno-clavicular joint and the latter was swollen and reddened and evidently contained fluid.

Up to Dec. 15th the patient's condition was obviously getting worse. On this day the injection into the flank of anti-streptococcic serum in doses of 10 cubic centimetres was commenced, a blood examination for culture purposes previously to doing so being refused. Further injections of 10 cubic centimetres of serum were given on the 15th, 16th, 17th, 19th, and 20th, six in all; the temperature fell immediately after each and no rigors occurred after the first injection. From the 20th the patient steadily improved and recovery was uninterrupted, the temperature finally falling to normal on Jan. 3rd, 1901. An urticarial rash had appeared on Dec. 28th, but was very transient. The patient was discharged on Jan. 16th feeling well; the appetite was good and the bowels were acting regularly. The pain had gone from the shoulder and the sterno-clavicular joints and there was only slight stiffness on movement. She could walk well without support. Vaginal examination showed evidence of the cellulitis, but most of the swelling had gone down and there was only a little thickening.

Remarks by Mr. BEALE.—Until recently the treatment of septicæmia has been limited to removing the origin of the poison, if possible, leaving the rest to the *vis medicatrix naturæ* and at the same time trying to aid the resistance of the body by the exhibition of stimulants. To be sure that a particular case is in reality one of streptococcal septicæmia the only infallible method is to make cultures from the blood on nutrient media and to have them examined by a bacteriologist. Unfortunately in this case permission to do so was rescinded at the last moment, and the anti-streptococcic serum was administered on the supposition that the case was one of septicæmia judged by the history and clinical signs. I think that I shall be able to show that these make the diagnosis quite clear.

The case commenced with a hæmorrhage from the uterus, possibly due to a miscarriage, which was allowed to continue for three weeks and was then followed by some manipulation, the nature of which I am unable to determine, but whatever it was it would give an opportunity for septic infection. This was followed shortly afterwards by a purulent discharge and the occurrence of pelvic cellulitis and by collections of pus in the pelvis and ovary. Passing on to the time when the septicæmia is supposed to have become evident we find a sudden rigor on Nov 30th, followed by a rise of temperature to 104·4°, and from this point the fever continued to be intermittent, another rigor occurring on Dec. 4th and again on the 12th, and a succession on the 14th and 15th. This, with the facial aspect and attitude and the presence of the enlarged spleen and diarrhœa, indicated that she was suffering from an extreme toxæmia. In addition to these, in septicæmia in all but very slight or rapidly fatal cases we should expect a leucocytosis, which was present in a marked degree. This, with the absence of a characteristic eruption and a continued fever, served to distinguish it from typhus and enteric fevers, the only two causes from which any difficulty of diagnosis could arise. In addition to the foregoing we have the development of a cardiac murmur and the joint condition as evidence in favour of septicæmia.

Considering now the reaction to treatment with anti-streptococcic serum we find that the behaviour of the temperature is remarkable, for each injection of serum was followed very soon by a rapid fall and a decline in the fever, till on Dec. 17th there was none. No serum was given after noon on the 17th and none at all on the 18th, but that night the temperature rose to 101°, and fell again after injection and similarly on the evening of Dec. 20th, after which it showed no tendency to rise much above 100°. This behaviour clearly points to cause and effect, for it can hardly be supposed that the considerable fall after each injection was a mere coincidence. The urticarial eruption which appeared on Dec. 21st was either the result of the septic poisoning or of the injection of the serum, and in this respect resembled the erythematous eruptions so often seen in diphtheria wards. It is interesting to note that there were no disagreeable sensations experienced by the patient after any injection except pain at the site, nor were there any collapse symptoms. I think that the foregoing facts clearly show that the case was one of septicæmia and that it was cured by the administration of anti-streptococcic serum.

I am indebted to Dr. Tate for permission to publish the case.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Arterial Hæmorrhage from the Ear and its Control by Ligature of the Common Carotid.—Acute Leukæmia.

A MEETING of this society was held on April 23rd, Dr. F. W. PAVY, the President, being in the chair.

Mr. WALTER G. SPENCER read a paper on Arterial Hæmorrhage from the Ear and its Control by Ligature of the Common Carotid Artery. He considered in this paper cases of severe, recurring, and ultimately fatal arterial hæmorrhage from the ear in cases of suppurating otitis media. Such cases were shown by post-mortem examination to be due to ulceration into the internal carotid artery at, or close to, its curve in the petrous bone. All these were necessarily advanced cases in which the prospects of surgical interference appeared to be unfavourable; but if all the recorded cases were considered it was shown that they fell into three groups. 1. Cases entirely unfavourable on account of being secondary to pulmonary tuberculosis, in which, although the hæmorrhage might be controlled, yet death ensued sooner or later from the pulmonary disease. 2. Cases of chronic ear disease which by modern methods were preventable by a timely operation on the middle-ear and antrum. Perhaps also large doses of mercury had bad effect in some of the older cases. 3. In a third group of recent cases arising after acute inflammation in children the hæmorrhage had been successfully controlled by ligature of the common carotid. In the absence of post-mortem evidence the source of the hæmorrhage was conjectural, but it came most probably from the carotico-tympanic twig close to its origin from the internal

carotid artery in the carotid canal. A clot might form in the proximal end of this branch after the ligature and so prevent retrograde hæmorrhage. When, however, the disease extended from this branch to the wall of the artery itself so as to perforate it, it was unlikely that any clot would be sufficient to restrain the retrograde hæmorrhage. A summary of many of the recorded cases, illustrative of these several groups, was given, and one under the care of Mr. Spencer was narrated. In the first and second groups ligature of the common carotid was advisable as a palliative measure, but cases in the third group were regarded as the most favourable for operation. The common carotid should be selected for ligature, not the internal, for many reasons.—Mr. W. MACADAM ECCLES remarked on the rarity of such cases as that recorded by Mr. Spencer. He asked—Had there been any other treatment of the ear after the hæmorrhage? Would Mr. Spencer advise ligature in all of these cases instead of other measures? What was Mr. Spencer's experience of ligature of the carotid in young subjects for conditions other than ear disease? In a child, aged two years, he (Mr. Eccles) had recently tied the carotid for hæmorrhage from the neck after removal of caseous glands. It was, of course, a serious procedure both in its immediate and remote effects.—Mr. SPENCER, in reply, said nothing was done to the ear of his patient for some time after the hæmorrhage. As to other methods of treatment, plugging, though usually tried, was of no use—the plug was generally forced out. Mr. Spencer then referred to some other conditions which rendered ligature of the common carotid necessary.

Dr. ARTHUR G. PHEAR narrated the particulars of a case of Acute Leukæmia. The patient was a man, aged 21 years, who after a few weeks' illness was admitted under the care of Dr. Alexander Haig at the Metropolitan Hospital. The leading symptoms of his illness were (1) marked and increasing anæmia; (2) fever of moderate degree; (3) stomatitis, affecting chiefly the gums, which were swollen, spongy, and later ulcerated; (4) enlargement of the lymphatic glands, limited at first to the submaxillary and cervical glands, afterwards involving the glands generally; (5) moderate enlargement of the spleen; and (6) a special kind of leukæmia. The blood contained 404,000 white corpuscles per cubic millimetre, the proportion of white to red corpuscles being one to three. The normal forms, excepting the basophile cells, were all involved in the increase. Abnormal forms were present in large numbers, consisting chiefly of large cells, each with a single voluminous nucleus, differing from myelocytes in the absence of neutrophile granulation. At the post-mortem examination there were found a persistent thymus gland, enlarged lymphatic glands, superficial and deep, and enlargement of the tonsils and of the spleen. The lymphoid follicles of the large intestine were swollen and ulcerated, the bone-marrow from the femur was opaque and pink in appearance and firm in consistence, and the marrow-juice abounded in cells similar to the large mononuclear cells of the blood. The microscopic examination disclosed a widespread overgrowth of lymphoid tissue in which the preponderating cells were not similar to those of normal lymphoid tissue, but consisted of large mononucleated cells closely resembling the abnormal leucocytes that during life had been found so abundantly in the blood. Microscopic specimens from the case were exhibited.—Dr. J. ROSE BRADFORD remarked that they knew very little of the nature of acute leukæmia. He believed, however, that it might be less rare than was generally supposed. It was often discovered by accident. The malady simulated a stomatitis, or, as in one case which he had seen, malignant disease of the lower jaw. Such cases certainly emphasised the necessity of a more systematic and routine examination of the blood. Three symptoms, purpura, stomatitis, and pallor together, should make one suspect the disease. Was acute leukæmia, he asked, of an infective nature arising in the mouth? It was a curious circumstance that the excess of lymphatic tissue seemed to lead to a diminution of the normal forms of leucocytes. The case before the society was no doubt a genuine case of acute leukæmia. In future cases it would be of interest to see if the blood or marrow of the bones contained any parasitic protozoa.—Dr. CHARLES REISSMANN remarked that the case brought before the society by Dr. Phear was one of interest because cases of lymphatic leukæmia such as this were much less common than cases of myelogenic leukæmia. Comparing these two conditions, he remarked that in the latter the cells which were found in increased numbers in the blood were the granular leucocytes, those forms which were known to react to chemiotactic stimuli. They were cells which had the power of spontaneous locomotion, and Ehrlich considered myelogenic leukæmia to be an active leucocytosis. In lymphatic leukæmia, however, there was an increase, not of the granular leucocytes, but of the non-granular, non-amœboid lymphocytes. These were not known to react to chemiotactic stimuli. Their number was increased in the blood when an alteration took place in the circulation of lymph through lymphoid tissue. Thus it occurred during digestion, when there was an active circulation through the lymphatic glands of the intestine. So also it occurred as the result of pilocarpin injections. This, then, might help to throw light on the pathology of lymphatic leukæmia. Turning to the question whether this disease might be due to a parasite Dr. Reissmann referred to Löwit's observations, the latter having found certain bodies in the blood of myelogenic leukæmia which he termed parasites. In a case of this nature now in the Middlesex Hospital Dr. Reissmann had found these bodies. But they occurred chiefly in the mast-cells. Using the same method of preparation of films he had found similar bodies, though smaller, in the blood of healthy rabbits and he believed them to be mast-cell granules swollen out and deformed during the process of staining. A small quantity of blood from the patient referred to was injected into the vein of a rabbit by Mr. A. G. R. Foulerton for Dr. Reissmann. The rabbit died a few days later but no changes were observed in its blood. It was, nevertheless, possible, and even probable, that both forms of leukæmia might be due to a parasite, and if so in lymphatic leukæmia the point of entrance was very probably the mouth.—Mr. SPENCER remarked that many of the cases belonging to this group of disorders ran one into another. They were probably due to parasitic infection. As to the point of entry, the glandular enlargements were some guide, but there seemed some evidence that the tonsils or the intestinal mucous membrane might also be the portal of entry.—Dr. THOMAS BARLOW remarked that one of the most interesting features of this case was its possible mode of origin. There was stomatitis in Dr. Phear's case. He (Dr. Barlow) referred to the case of a boy, aged six years, who was admitted to hospital for inflamed tonsils; they were sloughy-looking but were not diphtheritic. Later he developed hæmorrhagic stomatitis. Enlargement took place in the glands around the jaw and also the spleen and lymphatic glands in different parts of the body. There were considerable pallor and evident leukæmia. The patient died in three or four months. The diagnosis was confirmed and there was central necrosis of some of the glands. The interest of this case rested in its having started with buccal and throat affection. It was so very markedly the feature in these cases of acute leukæmia to get stomatitis that it separated some of these cases from others of the same group which were not connected with stomatitis.—Dr. PHEAR, in reply, said there had been no purpura in his case at any time. In this case the condition of the mouth was the first symptom, but in some other cases this was not so.

MEDICAL SOCIETY OF LONDON.

A Case of Extensive Enterectomy.—Intestinal Anastomosis for Atony of the Colon.

A MEETING of this society was held on April 22nd, Mr. JOHN H. MORGAN, the President, being in the chair.

Mr. ARTHUR E. J. BARKER read a paper on a case of Extensive Enterectomy. The case illustrated the dangers which sometimes arose as sequels to ordinary strangulated hernia where the bowel in the sac appeared to the naked eye fairly satisfactory and was consequently replaced within the abdominal cavity. The patient was a woman, aged 39 years, who had suffered from symptoms of strangulation in a right femoral hernia for only a few hours. The usual operation was done and a loop of small intestine was found which, though much discoloured, appeared in other respects quite viable. It was washed and replaced in the abdomen and a radical cure followed. Recovery was by primary union and the patient left hospital on the sixteenth day quite well. Soon after she had a violent attack of intestinal obstruction which, under the skilful treatment of her medical man, subsided in due course. Some weeks

later, when she had returned to her home in Cornwall, a more violent attack of obstruction took place accompanied by general peritonitis. When this had subsided her medical man sent her up to town again with a view to ascertaining what was the cause of these attacks and whether they were connected with the old strangulated hernia. With this view Mr. Barker agreed and opened the abdomen in the right linea semilunaris. The obstruction was found to be due to kinking of the bowel which had lain in the hernial sac; there was also some shrinkage of the lumen of the bowel at the spot originally constricted in the ring. This shrinking was partly due to ulceration of the mucous coat and partly to inflammatory matter externally to the constriction. The latter was so extreme that nothing but enterectomy offered any hope of remedy. There was extensive matting together of all the adjacent coils of intestine both above and below the narrowing, so that an extensive resection had to be done. The whole mass of matted intestine was resected, amounting to 37 inches, and an end-to-end anastomosis was made by suture in the usual manner. The wound was drained with gauze for a few days and then allowed to close. Recovery was uneventful. This case suggested, Mr. Barker thought, that in those instances—which were not uncommon—in which a loop of intestine had been damaged by strangulation, but was to the naked eye far from gangrenous, a wider use might be made of enterectomy than had hitherto been the case. The risks of returning doubtful bowel into the abdomen were frequently illustrated in practice and were probably greater than a properly planned enterectomy. Mr. Barker for his part recalled many cases in which he regretted not having resected the bowel instead of taking the chance of its recovering its perfect vitality and functions without adhesions. All Mr. Barker's resections of bowel done within the last two years by simple suture had been successful; he had therefore a decided preference for suture rather than for any form of button.—The PRESIDENT remarked that Mr. Barker's case raised the important point of deciding what action should be taken with strangulated bowel and the possibility of resulting constriction and subsequent obstruction. The younger the surgeon the more likely would he be to resect suspicious-looking bowel. Very often very severely damaged bowel would recover and for his part he would hesitate to remove intestine which showed definite signs of vitality. There was danger in removing the bowel in spite of modern methods. The occurrence of stricture after operations for strangulated hernia must be very rare; it certainly was in his experience, and he would be inclined not to resect the bowel if it presented signs of life.—Mr. J. D. MALCOLM remarked that this case raised several interesting points. There was no doubt in this case that the bowel was in a condition capable of recovery; and as there was in most such operations a risk of adhesions taking place he questioned the advisability of resection. He had recently operated on a very large inguinal hernia and put back the bowel matted together with a lot of adhesions, and the case did well.—Mr. BARKER, in reply, said that when he examined the loop of intestine after washing it there was not a trace of adhesion, it had not lost its gloss, and the circulation was recovering; but inside there must have been ulceration. It looked a promising case. This patient, however, really ran considerable risks, as shown by the subsequent attacks. It was important to divide the bowel well above and below the diseased portion, and this might be done fearlessly; he had recently removed five and a half feet of intestine from a patient, 76 years of age, with impunity.[1]

Mr. MANSELL MOULLIN read a paper on a case of Obstructive Atony of the Colon treated by Anastomosis. The patient was a woman, aged 29 years, who was admitted to hospital in October, 1900. The illness had begun seven years before with attacks of diarrhœa each lasting a few days, separated by intervals of health. At the end of a year the most obstinate constipation set in. There were also severe attacks of "colic" and great pain on defecation. The patient became bedridden and greatly emaciated (weighing only six and a half stones). Purgatives were administered at first with benefit, but in a little while these failed altogether and for the last five years no action of the bowels had taken place excepting after enemata. The last three years had been spent almost entirely in hospital. The appendix had been removed, and, in addition to this, laparotomy had been performed on two occasions with the view of obtaining relief from pain. Massage, galvanism, large doses of belladonna, and other remedies were tried without avail. The abdomen was accordingly opened for the fourth time and a lateral anastomosis by direct suture established between the ileum and the sigmoid flexure. The next day the patient passed a liquid motion naturally, the first for five years. Two days later another was passed. The wound healed up without being touched and the patient left the hospital, having put on more than a stone in weight, free from pain, with the bowels acting readily after occasional doses of compound liquorice powder. Mr. Moullin suggested that a similar proceeding might be adopted in cases of intense colitis in which it was thought advisable to give the colon rest in preference to establishing an artificial anus in the cæcal region with all the inconvenience of the constant discharge of liquid fæces. As regards the case which he had brought forward he had quite recently heard that the patient was passing scybala again and the constipation was returning. This pointed to contraction of the anastomotic orifice. Unless this was made of enormous size it was sure to undergo contraction.—The PRESIDENT remarked that the occasion for such operations must be very rare. He would like to ask if any apparatus was used. It would be interesting to know what became of the intervening piece of colon.—Mr. ALBAN DORAN wished to raise the question whether such operations would be justifiable for tympanites. He referred to a case with great swelling, but the patient suffered no inconvenience excepting when she "took cold" or suffered from some other trifling derangement of health, then the swelling and discomfort were extreme. He had also met with other cases which were much more serious. Why not resect the intestine in such cases? But it was not the colon which was alone at fault, it was probably a derangement of the sympathetic nerves, and unless the jejunum and sigmoid were anastomosed they would have tympanites still. These very severe cases of tympanites in middle-aged persons were, in his belief, of nerve origin.—Mr. MALCOLM referred to a case resembling the one under consideration. The patient was a woman, 55 years of age, upon whom he had operated several times, removing the appendix, opening the cæcum, and removing part of the colon. He proposed to connect the small intestine to the large gut.—Mr. BARKER referred to a case in which he had made a somewhat similar anastomosis to obviate the distress of a fæcal fistula in the right groin which had resulted from an abscess. He "kinked" the intestine, but this was not a success because the fæces continued to pass, as he found at a subsequent operation. He quite concurred in the view that these operations were not so difficult as had been thought. He was of opinion that for cases of chronic colitis transplantation was preferable to right inguinal colotomy.—Mr. MOULLIN, in reply, said that he had united the ileum to the colon by a double set of sutures. A lateral anastomosis between the ileum and the colon had a tendency to contract unless made of colossal size. A large proportion of the cases, such as the one he had narrated, were of a neurotic origin, but, nevertheless, surgical intervention was justifiable.

[1] THE LANCET, page 1186 of present issue.

OBSTETRICAL SOCIETY OF LONDON.

Saline Infusion in Puerperal Eclampsia.—Exhibition of Specimens.

A MEETING of this society was held at 20, Hanover-square, W., on April 3rd, Dr. PETER HORROCKS, the President, being in the chair.

Dr. ERNEST W. HEY GROVES read a paper on the Pathology and Treatment of Puerperal Eclampsia, with special reference to the use of saline transfusion, with notes of two cases. The first case was that of a primipara, aged 23 years. She had an easy labour in the absence of medical attendance. There were eclamptic convulsions and coma immediately after, which increased in severity for 12 hours in spite of morphia and pilocarpine. Endovenous injection of 100 ounces of hot normal saline was followed by rapid improvement. The coma and convulsions lessened at once and the fits ceased within three and a half hours. The coma passed off and diuresis occurred in 13 hours. The second case was that of a secundipara, aged 21 years. Convulsions and coma with anuria ushered in labour at full term. The fits were of extreme violence and numbered about 26 between 2 A.M. and 4 P.M., when 70 ounces

of hot normal saline were injected into a vein. The child was born at 5.30 and died almost at once. Frequency and violence of the fits lessened after transfusion, and ceased within 14 hours, while the coma passed off and diuresis was established within 48 hours. The return to consciousness was followed by two days of violent transitory mania and a week after delivery a relapse of the anuria and delirium threatened as the result of a large meat meal. Dr. Groves proceeded to tabulate 47 cases of puerperal eclampsia treated by this method by different observers, chiefly Porak (13) and Jardine (22). These showed a mortality of 12·7 per cent. A summary of the principal facts relating to the pathology and morbid anatomy of eclampsia was given, proving the toxic nature of the disease and showing the essential lesion to consist of minute capillary thrombi with hæmorrhagic infarctions, surrounded by tissue necrosis. This lesion was shown to be of the same character in the brain, the liver, and the kidneys, and to occur also in the lungs, the spleen, and other organs. The greatly increased coagulability of the blood was related to this lesion. The origin of the toxins was considered to be threefold: (1) from the placenta; (2) from the fœtus; and (3) from the alimentary canal. The pre-eclamptic stage of the disease was caused by the presence of the toxins in the blood. The actual convulsions and coma resulted when these toxins caused the coagulation of the blood and the multiple capillary thrombi. Dr. Groves concluded by suggesting that the therapeutic action of the saline solutions depended upon its hindering the formation of the capillary thrombi and dissolving those just formed. He pointed out that it could not act primarily as a diuretic because diuresis occurred after the convulsions had ceased. He also referred to cases in which gelatin injections had caused symptoms of anuria and uræmia accompanied by multiple thrombosis, arguing the possibility of these conditions arising from a morbidly increased coagulability of the blood.

Dr. HERBERT SPENCER congratulated Dr. Groves upon his interesting paper. He (Dr. Spencer) had only employed saline infusion in two cases, and although both these cases recovered he was far from attributing the result to the saline infusion. The mortality of eclampsia varied greatly. Before the treatment by morphia he had had a long series of successful cases and then several which were fatal. He thought that cases treated by morphia did better than those treated by chloroform, chloral, and bromides, &c., but he had had failures with the morphia treatment too. In his experience, however, morphia lessened the fits more than any other treatment, and as the diminution of the fits lessened the chance of cerebral and hepatic hæmorrhages he thought its value was great, though its employment was not free from danger. In one case, where there was a good deal of œdema of the legs, he had made incisions into the legs and fomented the incisions with a view to aid the elimination of the poison, and as the case recovered he would be inclined to try the effect of the incisions in other cases. With regard to the effect of saline infusions, he had tried their effect in cases of uræmia 12 or 14 years ago without benefit. Dr. Groves had compared the mortality of cases treated by saline infusion with that of cases treated by other methods to the disadvantage of the latter, but it must be remembered that from the former (all modern) cases septicæmia had been in great part eliminated, whereas it caused a considerable part of the deaths of the older statistics. Moreover, there was a tendency to publish successful cases where a new method of treatment was concerned, whereas if the case terminated fatally it was more likely to be unrecorded. One remark in the paper needed correction—namely, the statement that the mortality of cases treated without saline infusion was "never less than 20 per cent." Ebinger had published a series of 28 cases from the woman's clinic at Kiel, 1894–1900, with four deaths, a mortality of 14 per cent. If two cases (one fatal) in which saline infusions were employed were excluded it would be seen that the mortality (11 per cent.) was less than that given by the author for cases treated by saline infusion. Dr. Spencer urged that saline subcutaneous infusions should be made with strict aseptic precautions and that large quantities should not be injected at one spot, several cases of local gangrene and even fatal septicæmia having been recorded. He was not convinced that saline infusions had lessened the mortality of eclampsia.

Dr. G. E. HERMAN highly appreciated Dr. Groves's scholarly paper. He agreed with Dr. Spencer in thinking that the figures given were not convincing as to the superiority of this treatment. Veit, in his lecture advocating the treatment of eclampsia by morphia, had reported 60 cases with only two deaths; and Charpentier, in a paper advocating treatment by chloral, had collected 239 cases, with a death-rate of only 4 per cent. Here were a larger number of cases and a smaller death-rate than what was now put forward as evidence of the benefit of infusion of saline fluid. The theory put forward was that in eclampsia the coagulability of the blood was increased, but the only evidence of this was that in some cases the medical attendant had been surprised at the small amount of blood lost. Physiologists had, he believed, apparatus for exactly measuring the rate of blood coagulation, and it would be more convincing if the coagulability of the blood in eclampsia had been measured by an instrument of precision. He did not attach importance to the morbid condition said to have been found in the brain and quoted by Dr. Groves. Were the miliary hæmorrhages described by Dr. Groves anything but ecchymoses, such as were seen under the skin, the pleura, and elsewhere, and due to the tremendous venous congestion during the fit? Large cerebral hæmorrhage occurred so seldom that it could not be due to any condition which was a regular and essential part of the disease. He thought that cerebral hæmorrhage was occasionally seen in eclampsia because in a few cases granular kidney and the vascular degeneration associated with it were present, and in such cases the arterio-capillary changes predisposed to cerebral hæmorrhage. Pregnant women with previously diseased kidneys were more liable to eclampsia than those with healthy kidneys. Dr. Groves had described the chronic renal disease of pregnancy under the name of the "pre-eclamptic stage." He (Dr. Herman) thought that this term was hardly appropriate, seeing that not more than one in five of the cases suffered from eclampsia, and that in some cases eclampsia came on without any pre-existing renal disease. He thought the essential morbid condition in eclampsia was the acute degeneration of the cells in the great glands, the liver, and kidneys, and that the hæmorrhages were incidental and a result of the fits.

After some remarks by Dr. C. O. FOWLER and Dr. JAPP SINCLAIR,

Dr. W. S. A. GRIFFITH said he wished, in the first place, to point out the important mistake which Dr. Groves and many other writers on the subject made in discussing this subject under the title of "puerperal eclampsia," the disease being one of far wider extent than this term would indicate, for the cases in which eclampsia occurred were only a small fraction of the total number of cases in which the disease underlying eclampsia—namely, toxæmia with nephritis—was found. It was essential that the disease should be studied in a much wider sense, beginning with the cases in which albuminuria and dropsy in slight degree were the only recognisable symptoms, to the graver cases increasing in severity until even without eclampsia the health, if not the life, of the patient was in great danger, and through these to the cases in which convulsions and coma occurred in varying degrees of severity. Such a method would be of the highest benefit to the practitioner, for it would lead him to a more rational and probably more gentle method of treatment in the urgent cases and to a more rational and more active treatment in the cases which by the absence of eclampsia appeared to be less urgent. Cases of eclampsia and placenta prævia were alike in many ways. They suffered alike from the alarm to which they gave rise and the danger of the methods adopted for their relief. The same principles of treatment applied to both, and while the fact was recognised that the patient's safety was greatly increased by delivery it was forgotten in the hurry and anxiety to carry this out that the means used must be safe and not add to the danger. Forced delivery, morphia, pilocarpine, and septicæmia claimed many victims who ought to have survived if less heroic measures had been adopted. The method advocated by Dr. Groves was quite unnecessary except in a few special cases, but in these it would appear to be of real value by keeping the patient alive until the kidneys and other organs were able to resume their work.

On the motion of Dr. J. W. EDEN, seconded by Dr. A. E. GILES, the discussion was adjourned to the next meeting of the society on Wednesday, May 1st.

The following specimens were exhibited:—

The PRESIDENT: A Uterus from a case of Deciduoma Malignum with Microscopic Sections.

Dr. SPENCER: A Cystic Fibroid removed by Posterior Colotomy.

Dr. H. R. ANDREWS: Kidneys from a fatal case of Puerperal Eclampsia with Microscopical Sections.

The specimens were discussed by Dr. G. F. BLACKER, Dr. VICTOR BONNEY, Dr. HENRY BRIGGS, Dr. GRIFFITH, Dr. HERMAN, Dr. AMAND ROUTH, Dr. JAPP SINCLAIR, and Dr. BELLINGHAM SMITH.

HARVEIAN SOCIETY OF LONDON.

Exhibition of Cases.—Some Practical Observations on Antiseptic Surgery.

A MEETING of this society was held on April 18th, Mr. ALBAN DORAN, Vice-President, being in the chair.

Mr. H. J. CURTIS showed an Infant with Extreme Hemiatrophy of the Head and Face.—The case was discussed by Mr. DORAN, Dr. DUNDAS GRANT, Dr. S. G. FELCE, Dr. C. S. JAFFÉ, Dr. J. M. FINZI, and Mr. J. JACKSON CLARKE.

Mr. JACKSON CLARKE showed a case of Contracture of one Rectus Abdominis Muscle causing Spinal Curvature. The patient was a girl, aged nine years. Three months ago he had shown the same patient to the society. At that time there was a marked C-shaped kyphosis affecting the whole spinal column from the skull to the sacrum. The deformity was fixed, not being diminished by the patient's efforts or by passive force. Such fixed deformity had been termed "osseous," but this was not necessarily the case; thus in the present instance the spine had been brought straight by means of an antero-posterior splint and daily exercises. Beyond the straight position in the present instance no further correction could be obtained. This was accounted for by the condition of the left rectus muscle which was shortened and indurated. It recalled the condition of the affected sterno-mastoid muscle in congenital wry-neck. In the present instance no further improvement in the form of the spine, and hence no improvement in the patient's respiratory capacity, could be obtained without lengthening of the affected muscle. This effect would need to be obtained without interrupting the continuity of the muscle.—Mr. DORAN and Dr. DUNDAS GRANT discussed the case.

Mr. JACKSON CLARKE also read a paper entitled Some Practical Observations on Antiseptic Surgery. As applied to surgical work the terms "antiseptic" and "aseptic" were synonymous; whether pathogenic organisms were destroyed by chemical means or by heat it was equally in keeping with the principles of Listerism. Suppuration was to be regarded as a group of closely allied infective diseases. No surgeon or nurse who had any point of suppuration about the hands should take an active part in an operation. Suppurative foci about the patient's skin should also, whenever circumstances allowed, be cured before an operation was done. For preparing the patient's skin or the surgeon's hands for treatment by antiseptic lotion ether soap was to be preferred to turpentine. The soap should be applied to the dry skin and then thoroughly removed by warm water. The surgeon's hands should be kept smooth by the use of glycerine and water after each operation. Where a high-pressure apparatus for the sterilisation of dressings, towels, &c., was not at hand a clean potato-steamer kept briskly boiling for half an hour would answer the purpose. Real sponges formed the best of swabs because they did not leave any of their substance behind in the tissues; they should, however, not be used save when prepared under the surgeon's own supervision. Their proper preparation occupied four days and they should be dried in a dust-proof envelope. Lint swabs wrung out of 1 in 40 carbolic were not sterile; even small portions left behind in a wound caused suppuration. Swabs of absorbent wool inclosed in a double layer of gauze having its cut edge turned inwards were preferable. Mechanical aids to asepsis were never to be neglected. Careful shaving and the thorough removal of loose hairs were imperative wherever visible hair was present on the part to be operated upon. The mechanical removal of grit, &c., from wounds, combined with vigorous douching with warm saline solution, was often preferable to the use of carbolic or other lotions in recent wounds. Silk ligatures might be boiled for five minutes in 1 in 20 carbolic lotion without losing much of their strength; like other ligatures, they should be kept in 1 in 20 carbolic. All drainage-tubes should be boiled before being used. As a dressing in the case of clean wounds Mr. Clarke preferred to apply two layers of cyanide gauze next the skin; over that as much sterilised absorbent wool as was required, and over this again two layers of cyanide gauze. Iodoform was not an antiseptic in the same sense as was carbolic acid or as were the salts of mercury. It should not be applied to clean wounds, but it should be reserved for cases in which complete asepsis was impracticable. A stock of 10 per cent. iodoform-glycerine emulsion should be kept, and in cases in which packing was required sterilised ribbon gauze should be passed through the emulsion well stirred up, and after the surplus had been squeezed out the gauze should be applied to the wound. When saline solution was to be used for intravenous or subcutaneous injection it should be filtered through sterilised white (Swedish) filter-paper.—Mr. DORAN had heard numerous discussions on the relative merits of different antiseptic methods as applied to abdominal surgery for over 20 years. Further experience usually proved that the disputants never understood what the term "antiseptic" precisely meant. Wells's "toilet of the peritoneum" was essentially an antiseptic measure, whilst carbolic solutions, though antiseptic, were not disinfectant and thus failed where sepsis was already present. One strong opponent of "Listerism" and "asepsis" used the drainage tube freely, whilst another flushed the peritoneum with hot water, practices designed to remove septic products and therefore coming within the province of the new surgery which they condemned. Long statistical tables of an operation undertaken by one surgeon never proved the value of his method; his experience and dexterity rather than his lotions and dressings produced the good results. Antiseptics could never be soundly advocated by such publications. Mr. Clarke had wisely eschewed any recital of his own operative triumphs and had indicated rather how he thought that they should all set to work when they desired to practise true antiseptic surgery.—Mr. HUBERT C. PHILLIPS remarked that Mr. Clarke had made no reference to the after-treatment of wounds—operation or traumatic—by antiseptic dressings, and he called attention to the efficacy of collodion freely painted over strips of cyanide gauze as a means of keeping wounds free from external septic contamination and infection.—Dr. FINZI made a few remarks extolling the value of iodoform as an antiseptic surgical dressing, instancing its value especially in cases of gangrenous ulcers, in operations on the tongue, and as a surgical dressing after circumcision.—Mr. CAMPBELL WILLIAMS, Dr. DUNDAS GRANT, and Mr. H. M. PAGE also took part in the discussion and Mr. JACKSON CLARKE replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

Discussion on the Rotunda Hospital Report.

A MEETING of this section was held on March 15th, Dr. A. V. MACAN, the President, being in the chair.

Dr. W. J. SMYLY congratulated the Master of the Rotunda and his assistants upon the excellence of their report, which was creditable not only on account of the brilliant results obtained, but also for the manner in which the work had been recorded. He, however, deplored the classification of abortions as preventable and inevitable, and the absurdity of this classification was demonstrated in the report by the statement that out of a large number of abortions which actually occurred only eight were inevitable. He further objected to the term "induction of abortion" being applied to cases in which sea-tangle tents and tampons were introduced on account of hæmorrhage. In such cases the ovum was already partly detached, and this measure only accelerated a process already begun. Induction of abortion was a very serious procedure, only to be undertaken on the most urgent grounds, and after consultation. With regard to rupture of the uterus he had had good results with iodoform gauze drainage and bad results from operative measures, but in a paper recently published by Dr. Klein of Dresden with a careful analysis of 381 cases it appeared that the results were about the same, the mortality after operation being 44 per cent., whilst in those drained, tamponed, or douched it was 39 per cent.

Dr. J. H. R. GLENN thought that the report could be

very greatly improved. It was full of both typographical and grammatical errors. The cases generally were very incomplete. Case 4, page 2, was most interesting, but there was no diagnosis. In Table IV. there was mention of 13 cases of version—there were several kinds of version, and all through the report he had looked to see if there was any attempt first made at external version, but could see none. He noticed that they had gone back to the old term "transverse" instead of "oblique" presentation. As to the cases of contracted pelvis, he believed, speaking from personal experience, that it took the assistants a considerable time to become adepts in the use of Skutsch's pelvimeter and meantime their measurements were not above reproach. In the table of contracted pelvis there were a great many blanks, a thing which should not be. There was no record kept of the amount of blood lost in cases of accidental hæmorrhage, placenta prævia, or post-partum hæmorrhage. This should be done by weighing diapers and sheets in the hospital. Again it was stated that "three patients who had no hæmorrhage on the couch lost a considerable amount on being put to bed." His explanation of that was the fussiness of sisters and lady superintendents in their anxiety to have the labour ward ready for the next case. He thought that it would be a great improvement if, as in the London hospitals, the report was entrusted to a medical or surgical registrar accustomed to the work year after year. Such a man would produce a more scientific report, and could also do some original work, which was badly wanted in Dublin, where a large amount of valuable clinical material was wasted.

The PRESIDENT agreed with Dr. Glenn that the report contained some extraordinary mistakes. It seemed to be the routine treatment to curette all cases where the temperature went up in the puerperal state, but he did not think it right. He thought 29 cases of manual removal of the placenta a large number. There seemed to be a great many cases of post-partum hæmorrhage. It was stated that "some cases of secondary post-partum hæmorrhage were due to retained membranes, and yielded to suitable treatment." It was many years since he (the President) came to the conclusion that retained membranes could not cause hæmorrhage. In cases of badly contracted uterus both hæmorrhage and retention of membranes occurred, and in removing the latter the insertion of the hand made the uterus contract and stopped the hæmorrhage.

Dr. H. JELLETT, Dr. LANE, and Dr. SMITH also took part in the discussion.

SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN.—An ordinary meeting of this society was held at the North-Eastern Hospital for Children on April 19th, Dr. A. Ernest Sansom being in the chair.—Dr. Sansom showed a lad, aged 11 years, many of whose joints were affected with Arthritis Deformans. There were no enlargement of the spleen and no structural affection of the heart. The skin was slightly pigmented. Onset occurred with a subacute attack simulating "rheumatic fever." There was no family history of rheumatism. Great improvement had taken place under massage and measures likely to promote good nutrition.—Mr. R. Clement Lucas suggested that the joint mischief might have originated in a focus of suppuration about the jaws, tonsils, or elsewhere. In a recent case he had found staphylococci in fluid from a hip-joint affected with osteoarthritis. He inquired whether a bacteriological examination had been made in this case.—Dr. Theodore Fisher, Mr. Milner Burgess, and Dr. George Carpenter made remarks.—Dr. Sansom, in reply, said that no focus of suppuration had existed nor was a bacteriological examination carried out.—Dr. James Taylor showed a case of Muscular Atrophy which he believed to be a connecting link between pseudo-hypertrophic paralysis on the one hand and progressive muscular atrophy on the other. In addition to hypertrophy of the muscles there was also considerable wasting. The boy, now aged 10 years, had been under observation for three years and his symptoms had rather improved than become worse. The disease was not symmetrical; there were marked fibrillary twitchings in the affected muscles.—Dr. J. H. Sequeira showed three patients suffering from Progressive Muscular Atrophy. The characteristic phenomena were present. An interesting feature was that although the patients were members of large families yet there was no similar affection in the brothers and sisters.—Dr. Douglas Drew demonstrated three cases of Nævo-Lipoma for Mr. A. B. Roxburgh. The lesions affected the leg and lower part of the thigh in one case, the thigh in a second, and the pectoral, axillary, and intra-spinous regions in the third case.—Dr. Drew also showed a child, aged six years, upon whom he had performed McEwen's Osteotomy for Genu Valgum 12 months ago. The results of the operation were satisfactory in straightening the limb, but although splints had been worn since the operation the latter had failed to cure the dislocation of the patella. Dr. Drew intended to perform a second operation for the dislocation.—Dr. J. Porter Parkinson showed a Gumma in the Heart of an infant, aged three months. The lungs and spleen contained tubercle. The gumma, which lay in the wall of the left ventricle just below the auriculo-ventricular groove, was three-quarters of an inch in diameter and proved to be a pale, tough, yellow mass, well marked off from the adjacent muscle. Mr Targett reported that the lesion "may be regarded as a gumma of the heart."—Dr Carpenter thought the mass might equally well be one of tubercle. He had published an almost similar case four years ago.—Dr. Fisher regarded the absence of caseation from the specimen as a point in favour of its syphilitic origin.—Dr. Parkinson, in reply, said that the evidence of gumma depended on the hardness of the lesion, the absence of caseation, and the microscopic report.—Dr. Parkinson also exhibited a Perforated Gastric Ulcer in a male child, aged two years.—Dr. Sequeira showed three children with Lupus who had been treated by the Finsen method at the London Hospital. The results had been excellent.—Dr. D. McKenzie showed an infant, aged 11 months, who had been brought up on proprietary food and was now suffering from Scurvy. She had pains and tenderness in the lower limbs and changes in the gums, but no anæmia. There were no signs of rickets.—Mr. J. H. Sanders mentioned a similar case where benefit had followed alteration in diet and the legs being put up in plaster-of-Paris.—Dr. Carpenter mentioned a case where the gums had been treated with chlorate of potash, with the result that the liver became enlarged and the child nearly died.—Dr. Sansom said that chlorate of potash was a dangerous drug owing to its destructive influence on blood corpuscles. Practitioners should think twice before administering it, especially to children.—Dr. Fisher read a paper on a case of Swelling of the Eyelids after a Warm Bath.—Dr. Carpenter and Mr. Sydney Stephenson suggested urticaria as a possible cause.

LIVERPOOL MEDICAL INSTITUTION.—An ordinary meeting of this institution was held on April 11th, Mr. Edgar A. Browne, the President, being in the chair.—Dr George G. Hamilton related a case of Enlarged Gall-bladder which was adherent to Poupart's ligament.—Mr. Damer Harrisson read notes of a case of Idiopathic Cortical Hæmorrhage treated successfully by operation.—Dr. Nathan Raw mentioned a case in which he had removed a large tooth-plate from the lower end of the œsophagus by aid of the x rays. The patient, a man aged 35 years, of very powerful physique, was found attempting to cut his throat with a broken tooth-plate; on being discovered he hastily swallowed the plate, pushing it down his throat with his fingers. Examination by x rays revealed it impacted in the œsophagus, just below the level of the upper end of the sternum, at a point (measured with a sound) 12 inches from the teeth and lying transversely across the œsophagus. Repeated attempts with ordinary forceps failed; whereupon the patient was seated in a chair in front of an x-ray tube, the fluorescent screen was held up, and a pair of long forceps were passed down the gullet, being guided to the tooth-plate by carefully watching on the screen. Having obtained a firm hold the plate was dragged out. Some considerable injury must have been done to the gullet by the manipulation, for the patient had an extensive general cellulitis afterwards with great dysphagia, but he made a good recovery and was transferred to Dr. S. A. Gill of Formby for treatment of his mental condition.—Dr. Gill stated that the patient was admitted to his private asylum suffering from ordinary melancholia with suicidal tendencies. There were also external evidences about his throat of recent attempts at suicide and he constantly regurgitated from the œsophagus purulent and very offensive pus; there were also dysphagia, huskiness of voice, and some swelling about the throat. The patient had improved bodily and was now able to take the ordinary diet of the asylum.—Dr. T. B. Grimsdale read notes and showed

composite charts giving the mean pulse and temperature curves in two series of cases of abdominal section, comparing the recoveries after antiseptic operations with those after aseptic operations. The ease of the recovery as shown by the pulse and temperature curves, more especially the reduction in the pulse-rate, the absence of pain after operation, and the diminished amount of flatulence, were marked features of the aseptic series. The details of the method adopted were described. The series of 20 consecutive cases consisted of four abdominal hysterectomies, six ovarian tumours (one strangulated and one complicated with abscess of the vermiform appendix), two of hydrosalpinx, one retro-peritoneal tumour, three of double pyosalpinx, one ovarian abscess, and three cases of chronic peritonitis with abscess. There was no mortality in either series.—Dr. Frank E. Marshall related a series of 52 cases of General Anæsthesia induced with Chloride of Ethyl, for which he claimed the following advantages: the heart and circulation were only slightly affected, the respiratory system was unaffected, the rapid induction of anæsthesia, rapid recovery of consciousness, no bad after-effects, and a longer period of anæsthesia than was produced by nitrous oxide. The cases comprised 46 teeth extractions, with two failures; and six minor operations (opening of abscesses and two double tonsillotomies).—Mr. William Fingland thought that nitrous oxide as compared with chloride of ethyl had great possibilities and could be safely prolonged for the performance of many surgical operations. Chloride of ethyl inhalation appeared to have many good qualities and its future development as a general anæsthetic would be of interest.

FORFARSHIRE MEDICAL ASSOCIATION.—A meeting of this society was held in the University College, Dundee, on April 5th, Dr. J. G. Havelock, the President, being in the chair.—Dr. J. D. Gilruth (Arbroath) gave a short account of some cases of Small-pox and showed a photograph of one of the cases. The relative severity of the symptoms and their relation to the time of vaccination in each case were discussed.—Dr. J. Constable (Leuchars) discussed some cases which he had had in his practice and the supposed origin of the disease in his cases and in Dr. Gilruth's cases—viz., old clothes.—Dr. R. C. Buist suggested the possibility of infection from other ports by ships.—Dr. Gilruth replied.—Dr. Gilruth also showed Radiographs of a severe case of Rachitic Curvature of the Tibia and Fibula from which he had removed wedges of bone with good result. Photographs taken before and after operation were also shown.—Professor D. MacEwan showed a specimen of Tumour of the Thigh removed from a woman, aged 25 years, the nature of which was as yet undiscovered. The history and characters of the tumour did not resemble those of sarcoma or myoma and the tumour itself was quite free from bone. There was no history of syphilis.—Professor MacEwan also gave an account of three Bladder Cases. The first was a case of recurrent calculi in the bladder. The patient, a man, had been operated on three times. Eight calculi were removed at the first operation, two nine months later, and three nine months later than that. Suprapubic lithotomy was performed twice and lateral lithotomy the third time, as the cicatricial contraction resulting from the previous operations had drawn the peritoneum too far down to allow a suprapubic lithotomy to be performed successfully. The second case was one of enlarged prostate treated by double orchectomy with marked improvement. Having had hourly micturition the patient was able four months after operation to retain urine for four hours by day and all traces of cystitis had entirely disappeared. Professor MacEwan reiterated the conclusions which he had formed in his paper on this subject read at the meeting of the British Medical Association at Carlisle four years ago and stated that his further experience confirmed these—viz., the diminution of the gland, vesical contractibility might return even after absence of years, and the results were quite as good as those of prostatectomy. These conclusions, he maintained, held good if suitable cases were chosen. The indications for this form of treatment were given. Reference was made to the high death-rate on the introduction of this treatment and reasons were given. The mental disturbance after these operations was compared with mental disturbance after operations on other pelvic organs. The third case discussed was that of a young man, aged 19 years, who had suffered from frequency of micturition. There was no stricture and no stone but the cystoscope showed an ulcer of the bladder. This ulcer was scraped and the bladder was drained after median cystotomy. Six weeks after the operation the patient was able to retain urine for six hours. This form of complaint was then discussed shortly.—Professor J. A. C. Kynoch, Dr. Buist, Dr. Gilruth, and the President discussed several points in the cases.—Professor C. R. Marshall then discussed the advantages of heroin and dionin, their composition, and how they had been discovered. Heroin, he said, was similar to morphine in its effects except in one important point—viz., it was less of a depressant on the respiratory system. It was more powerful than codeine but less toxic. Dionin was less powerful than heroin but more so than codeine. The uses and doses of these two substances were then given.

LARYNGOLOGICAL SOCIETY OF LONDON.—A meeting of this society was held on April 12th, Dr. Cresswell Baber, the President, being in the chair.—Mr. W. G. Spencer again showed the boy exhibited at the last meeting with a Tumour of the Right Vocal Cord and a Swelling of the Leg. Both swellings had greatly improved under treatment by iodide of potassium.—Dr. StClair Thomson showed a man, aged 33 years, with Chronic Laryngitis and an Ulcer on one Vocal Cord which he suggested were secondary to pus in the nose.—Dr. Thomson also showed a case of Infiltration of the Right Vocal Cord in a man, aged 40 years, probably of the nature of pachydermia diffusa, and another case of a similar condition in a man, aged 56 years which he suggested might be due to a blood-clot simulating a neoplasm.—Dr. Scanes Spicer showed a case of Laryngeal Growth occurring on the posterior wall and accompanied by paresis of the left vocal cord which was probably malignant. He also showed a case of Sub-glottic Swelling of doubtful origin.—Dr. Logan Turner showed a specimen of a Larynx from a case of primary laryngeal diphtheria in an adult and one of a Larynx which was studded with small white points of a doubtful nature.—Mr. W. J. Walsham showed a case of Destruction of the Nose caused by a ferret for which 18 operations had been performed.—Dr. Jobson Horne showed a case of Epithelioma of the Larynx and Dr. Fitzgerald Powell one of Tuberculosis of the Larynx.—Dr. Wyatt Wingrave exhibited specimens of the two chief classes of Intranasal Papillomata, and Mr. Lake drawings of (1) a Cyst of the Floor of the Nose and (2) Pachydermia Laryngis of a tuberculous nature.—Dr. Atwood Thorne showed a case of Pharyngo-mycosis, the treatment of which was fully discussed.—Dr. H. Tilley showed a case of Antral Suppuration with marked bulging of the inner wall towards the nose.—Dr. L. H. Pegler showed a case of Cyst of the Thyroid Gland.—In the discussion which followed treatment by means of injection of perchloride of iron was fully entered into.—Mr. R. S. Charsley showed a case of Foreign Body in the Nose, Dr. Lambert Lack a case of Unusual Tumour on the Posterior Wall of the Larynx, and Dr. Dundas Grant (1) a case of Lupus of the Septum, (2) a case of Pachydermia of the Vocal Processes, and (3) a case of Specific Perforation of the Palate with ulceration of the larynx of tuberculous appearance occurring in a woman of middle age.

IPSWICH CLINICAL SOCIETY.—A meeting of this society was held on April 11th, Mr. James Hossack being in the chair.—A vote of condolence was passed to the relatives of the late Dr. C. M. Durrant upon his demise.—Mr. H. B. Rygate read notes on a case of Hyperpyrexia in a girl who was admitted to the Fever Hospital suffering from scarlet fever. The temperature rose to 106° F., but was kept down partially by means of ice and sponging. Latterly, before death ensued, the temperature, which was 106°, was unaffected by ice. The patient developed pain and swelling in the right ankle, knee, and shoulder, for which salicylates were given. Mr. Worts showed (for Dr. H. H. Brown): (1) A case of Excision of the Jaw (with specimen); (2) a specimen of Cancer of the Peritoneum; and (3) a case of Gunshot Injury.—Mr. C. K. Moseley read notes upon, and demonstrated the use of, "Kelene," upon two patients.—A discussion afterwards followed, the general opinion being that the anæsthetic was unsatisfactory inasmuch as there was great difficulty in knowing when anæsthesia was complete, the patient being in some cases quite conscious though powerless to move.—Mr. Hossack showed a specimen of Ascaris Lumbricoides 14 inches long.

SOUTHPORT MEDICAL SOCIETY.—At a meeting of this society, held on April 10th, Dr. Robert Harris being

in the chair, Mr. G. Reinhardt Anderson moved the following proposition:—

That, in view of the difficulty often arising in isolating cases of infectious disease other than those proper for admission to the public infectious hospitals, it is the opinion of this society that steps should be taken to approach the Corporation of Southport and the Local Board of Birkdale, to induce them to provide such accommodation in their new hospitals—under such regulations as would enable individual practitioners to continue in attendance upon their cases; and that a sub-committee be appointed to carry out this suggestion.

This was carried unanimously and a sub-committee of eight members was appointed for the purpose.—Dr. W. A. Mackay showed: (1) a Temperature Chart of a protracted case of Enteric Fever; and (2) Pulse Tracings from a case of Mitral Disease with a Tracing of the "Recurrent" or "Return Pulse."—Dr. J. J. Weaver (medical officer of health) read a paper on the "Fourth Disease," and gave details of several cases which had recently occurred in the Borough Hospital either preceding or following typical scarlet fever. Dr. Weaver briefly discussed the symptoms and the diagnosis and an animated discussion followed.

Reviews and Notices of Books.

The Fundamental Data of Modern Pathology. By Dr. ACHILLE MONTI, Professor of Pathological Anatomy, University of Pavia. Translated from the Italian by JOHN JOSEPH EYRE, M.R.C.P. Irel., &c. London: The New Sydenham Society. 1900. Pp. 266.

IN 1897 the Royal Lombard Institute proposed as the subject for a prize essay the following theme: "What influence has the doctrine of proliferation of the cells beyond the normal exercised on the pathology of man? What has that of the pathogenic microbes? Contrast the two doctrines with others older. The advantages of both in the treatment of human infirmities." The prize was gained, very deservedly as we should imagine, by Professor Monti with the dissertation translated in this work, with a few additions, into English.

The subject proposed by the Royal Lombard Institute amounted to an invitation for a critical review of the influence of modern histology and bacteriology upon medical theory and practice. Professor Monti in his brilliant treatise has shown not only a thorough grasp of his subject in its modern developments, but a vast amount of historical learning, together with a critical faculty of no common order. He has strictly adhered to the theme proposed, and his disquisition falls into six chapters in accordance with its terms. In the first he deals with the development and doctrines of "cellular pathology," devoting a good deal of attention to the subject of karyokinesis. He traces the influence of cellular pathology upon the doctrines of inflammation, tumour-formation, and kindred matters. The second chapter treats of the evolution of parasitic theories of disease, of the paths of transmission of infections, and of the modes in which bacteria produce disease. In the two following chapters we find an admirable review of the older doctrines of pathology and of the manner in which they led up to the views held at the present day. The final chapters deal with the practical applications of histology and bacteriology in medicine and surgery, especially in the diagnosis of tumours and of infective conditions. The writer also treats of the questions of antiseptics, preventive inoculations, and serotherapy.

There is so much that is admirable in the essay that it is not easy to pick out any special parts for criticism. But we should like to call attention to the apparently in some cases well-founded claims made by Professor Monti as to the priority of certain observers, commonly overlooked, in the credit of establishing or suggesting doctrines now universally accepted. Bottini is stated to have anticipated Lister in the use of carbolic acid in surgery and to have proclaimed the doctrine of antisepsis a year before Lister's first publication on the subject. The theory which attributes the origin of neoplasms to included embryonic rudiments, usually known as Cohnheim's theory, appears to have been previously developed in some detail by Durante. The doctrine of pathogenic micro-organisms in its modern sense was first laid down by Bassi in 1835. Pacini described vibrios in Asiatic cholera in 1854. These facts do not detract in any way from the credit of those whose labours afterwards established the doctrines in question on a firmer basis, but they are of great historical interest, and Professor Monti gives chapter and verse for them all and for many more. It is pleasant, too, to find full credit given to William Addison and to Waller for their shares in the development of the doctrine of inflammation. The writer seems, indeed, more familiar with the older school of English pathology than with the labours of our more recent workers. A very important section of the last chapter, largely re-written since the work was first produced, is that relating to malaria. It constitutes one of the best accounts of the life-history of the malarial parasite and of the mosquito theory accessible to English readers. We are not in agreement with Professor Monti on every point with which he deals; notably we cannot agree with his views on the simplicity of the bacteriological diagnosis of diphtheria. The book is one, however, which will be read with pleasure and profit by everyone interested in pathology and it constitutes a brilliant addition to the critical literature of the science. We regret to add, in conclusion, that the pleasure of the reader is sadly marred by the character of the translation, upon which the new Sydenham Society can by no means be congratulated. The genius of the Italian language differs so widely from that of the English tongue that any attempt to turn the one into the other without a considerable recasting of the sentences can only end in disaster. Every page of this translation is disfigured by sentences which hardly deserve the name of English. The definite article is habitually inserted where it is not needed; words are frequently used in their wrong order and not rarely in their wrong sense. Thus the translator often writes "successive" where he means "succeeding" and "distended" where he means "spread"; on one page we even find "incommensurable" used for "innumerable." The result is often nonsense. He is addicted, too, to the use of barbarous words, such as "neoformed" and "laparotomic," and his classics are as bad as his English. Thus he coins the words "nephrites," "peritonites," &c., as plurals of nephritis, peritonitis, &c. We read of "bacillus tetanis" and learn that "Natura non facit saltus." Much of this may be pure carelessness, and, indeed, misprints are not uncommon, especially in the footnotes, but the reputation of the New Sydenham Society is too high to allow us to pass over in silence so slovenly a translation of a work of signal merit.

Diphtherie. By Professor Dr. E. v. BEHRING. Berlin: Verlag von August Hirschwald. 1901. Pp. 200. Price 5 marks.

THIS book forms one of the series belonging to the "Bibliothek von Coler" (Coler's Library), edited by Dr. Otto Schjerning, an officer holding one of the highest positions in the medical department of the German army. The works appearing under his editorship naturally, therefore, have special reference to military medicine.

This volume contains a very complete account of diphtheria from every point of view. Some interesting information is to be found under the heading "Begriffs-definitionen." This term includes not simply a "definition" of the word "diphtheria," but also a history of the synonyms which have been employed and a consideration of the confusion that at

one time existed between the signification of the terms "diphtheria" and "croup."

The name of the author is sufficient to indicate that the sections on the bacteriology of the disease would be most instructive. Nor will the reader be disappointed. A detailed account of the characteristics of the Klebs-Löffler bacillus is given, including many original experiments conducted by Professor Behring himself. The bacteriological diagnosis receives due attention, but the questions of artificial immunity and serum therapeutics scarcely receive the attention due to them.

Leitfaden für Operationen am Gehörorgan. (*Guide to Operations on the Organs of Hearing.*) By Professor Dr. F. TRAUTMANN, Geh. Med.-Rath, Generalarzt a. D., dirig. Arzt der Abtheilung für Ohrenkranke in der Königl. Charité. Berlin: Verlag von August Hirschwald. 1901. Pp. 120. Price 4 marks.

THIS book forms the fourth volume of the "Bibliothek von Coler." An account is given of the most important operations on the outer ear, including the removal of tumours, benign and malignant. Directions are also given as to the various operations which may have to be performed on the inner ear, such as paracentesis of the membrana tympani, tenotomy of the smaller muscles, removal of the ossicles, &c. The directions are given in simple language and should be not difficult to follow. The value of the little work is considerably increased by the 27 illustrations which appear in the text.

LIBRARY TABLE.

Practical Points in Nursing for Nurses in Private Practice. By EMILY A. M. STONEY. Second edition. London and Philadelphia: W. B. Saunders and Co. 1900. Pp. 456. Price 7*s.* 6*d.* net.—We find some difficulty in reviewing this book, for it is evidently written with every desire that it should be of use to those for whom it is composed, and yet it bears evidence in many places of haste and carelessness. Let us first give such praise as is due. The purely nursing portions of the book are good, and the instructions given in Chapters I., II., and III. are very practical; so is Chapter V. on Nursing in Special Medical Diseases, more especially the section on caring for the dead, which is admirable. But when Miss Stoney strays into the paths of medicine or pathology or the kindred sciences she goes somewhat astray. Thus under the head of "Irritant Poisons" we find ammonium given, and as antidotes for it vinegar, lemon juice, and the like. In the next line we find ammonia given separately together with the other caustic alkalies. On p. 263, under the head of "Dressing the Cord," we find that the cord should be "placed on the left side of the body, because if placed on the right side it would press upon the liver, which at birth is larger than the other organs and which reaches down to the navel." It is absurd to suppose that two inches of cord would press upon the liver to any harmful extent, and the liver, whether in the infant or in the adult, is always larger "than the other organs," although in the infant it is larger in proportion than in the adult. Miss Stoney's style lacks clearness. Take the following (p. 165). *Apropos* of hysterectomy she says: "Insanity is *not* a complication of this operation, the recovery from which is usually rapid, but when insanity does set in this is commonly the cause, and the patient generally recovers." On reading this sentence we could not at first understand to what "this" in the clause "this is commonly the cause" referred, but on looking at the commencement of the paragraph before the one which we have quoted we found that Miss Stoney was referring to loss of blood and shock. Miss Stoney in her preface thanks a certain medical man for his "technical revision and for other kind assistance." We would suggest that before the third edition appears he, or someone else, should revise the text again.

Lehrbuch der Wochenbettpflegerinnen. (*Manual for Monthly Nurses.*) By Dr. PAUL RISSMANN. With Nine Illustrations. Berlin: Karger. 1901. Pp. 66. Price 1 mark 60 pfennig.—This little book is intended as a manual of instruction for monthly nurses. It contains a considerable amount of information put in a concise and clear manner. The author has taken care not only to give the most important facts about pregnancy, labour, and childbed, but has also added short paragraphs upon elementary subjects, such as weights and measures, percentages, and the method of using and reading a thermometer. The various complications that may arise either during labour or childbed are mentioned, as well as the more important disorders of the newly-born infant. As the various subjects are arranged in numbered paragraphs and a fairly full index is added reference to any particular point is easy. The information given is well within the grasp of a fairly intelligent woman and cannot fail to be of service to such German women as are engaged in this branch of nursing. The book is interleaved so that notes can be made.

How to Nurse the Sick. (The Home Series.) Edited by FLORENCE WHITE. Pp. 84. With numerous Illustrations. London: *Black and White* Office. Price 2*d.*—This is a very useful little book of instruction intended for that large class of persons who in times of sickness are most likely to have neither a trained nurse at home nor hospital treatment. By carefully following the precepts here laid down any woman of average intelligence should be able to render herself of far more assistance to the medical man than she would be if entirely uninstructed. The general indications for hygiene, cleanliness, and preventing the spread of disease are stated with most commendable simplicity and clearness. A useful form of chart for the home nurse to fill in daily is contained in the book and at the end is some judicious advice for the treatment of such slight ailments as do not necessitate the aid of a medical practitioner. Care has been taken, however, nowhere to encroach beyond the nurse's province and readers of the book are more likely than are the ignorant to seek medical aid at the proper time. A copy of this little work placed in the hands of the wife or sister who is acting as nurse would often save a medical man time and trouble where there is no trained attendant.

The Coming Waterloo. By Captain CAIRNES. London: Archibald Constable and Co. 1901. Pp. 364.—In this volume is given an account of an imaginary war between England and France. At the commencement of the narrative it is supposed that a naval war has been in progress for some time, but has come to such a pass that it appears to be impossible to exhaust either of the combatants sufficiently to compel him to sue for peace. At last comes a change: Russia draws the sword on behalf of France, and Germany and Austria become allies of Great Britain. The story relates the experiences of a certain Lieutenant Walter Desmond of the Royal Ulster Fusiliers. The English army is landed in France and the supposed engagements which follow are graphically described. In the end the French are driven back and, history repeating itself, the Germans arrive in time to complete the rout. The book is written in an interesting manner, but not being military authorities we cannot comment on the tactical and other special knowledge exhibited. A thrilling account is given of an engagement fought under the rays of powerful electric lights, but the chief point insisted on is the value of training the men to shoot accurately and with judgment. It is shown how with such qualities "the highly-trained few will annihilate the half-trained multitude in the fighting of the future."

The Psychology of Reasoning based on Experimental Researches in Hypnotism. By ALFRED BINET, Doctor of Science, Laureate of the Institute (Académie des Sciences and Académie des Sciences Normales), Director of the Laboratory of Physiological Psychology in the Sorbonne (Hautes Études). Translated from the Second French Edition by ADAM GOWAN WHYTE, B.Sc. Chicago: The Open Court Publishing Company. London: Kegan Paul, Trench, Trübner, and Co. 1901. Pp. 192. Paper covers. Price 1*s.* 6*d.*—This book is, we notice, the forty-seventh of a series published under the general title of "The Religion of Science Library" and is "entered at the Chicago Post Office as second-class mail matter." We do not profess to be able to explain the exact significance of the expression "second-class mail matter," as understood at the Chicago Post Office, but possibly the information may be of use to some of our readers. It is not quite clear for whom the translation of M. Binet's book was made. To anyone generally familiar with the writings of Carpenter, Herbert Spencer, Maudsley, and Hack Tuke, and who has a practical knowledge of the proceedings of the Society of Psychical Research, the book may be recommended as a good one to while away the time spent in a long railway journey. To those who wish to obtain information on the psychology of reasoning we should recommend a previous study of the works of the authors whom we have mentioned. M. Binet, like so many of the modern French school of psychologists, attaches to researches in hypnotism an importance to which they are not entitled. He is presumably a serious person, yet we notice amongst other works on psychology issued by the publishers of this book one entitled "The Psychic Life of Micro-organisms," written by the same author.

Practical Licensing Reform. By the Hon. SIDNEY PEEL, Barrister-at-Law, late Fellow of Trinity College, Oxford, Secretary to the Royal Commission on Liquor Licensing Laws. London: Methuen and Co. 1901. Pp. 144. Price 1*s.* 6*d.*—This is an extremely good little book, on a most important subject, written by a clear-headed, well-trained, earnest man who has had a unique opportunity of obtaining accurate information. It is, perhaps, hardly necessary for us to say that Mr. Peel is a son of the late Speaker of the House of Commons, and that as secretary to the late Royal Commission on the Licensing Laws he necessarily had brought to his notice all the evidence given before that Commission. It may, however, be well to point out that the secretary of a Royal Commission during the whole course of the sittings is daily and hourly brought into personal contact with the witnesses who are examined, and by this means he obtains a clear insight into the whole trend of the question under review, of the personal idiosyncrasies of the individual witnesses and of the peculiarities of the interests which they represent. For these reasons we heartily commend this book to all those who are interested in the question of the licensing laws—that is to say, to all those who have at heart the well-being of the people of Great Britain and of Ireland. The book gives an account of the licensing laws as they exist at present and contains chapters on the excessive number of licensed houses and its effects and on the tied-house system. The causes of failure in the present licensing administration are dealt with under the headings: (1) Defects in the Law; (2) Defects in the Licensing Authority; and (3) Defects in the Results of Appeal to Quarter Sessions. The attitude and administration of the police and police authorities are dealt with in a separate chapter. The effects of Sunday closing and the questions connected with the *bonâ-fide* traveller and with clubs are dealt with in detail. There are a chapter on the popular control of the liquor traffic and an appendix containing a summary of the recommendations of the Royal Commission. Every subject is carefully, concisely, and conscientiously treated. We cannot deal in this place with the complicated questions raised. We do not profess to be in exact accord with Mr. Peel on every point with regard to which he gives an opinion, but on all matters of fact the book may, we believe, be absolutely relied upon, and for this reason, as well as for others previously given, we trust that the book will have—as it certainly deserves to have—a wide circle of readers.

La Grossesse. By Dr. L. BOUCHACOURT. With a Preface by Professor BUDIN. Paris: Georges Carré et C. Naud. 1901. Pp. 516.—Though doubtless very carefully prepared and valuable in its way this work will probably not find many readers among the profession in England. The book contains physiological studies of the pregnant state in women and the lower animals; a review of both ancient and modern opinions bearing on the influence of every-day occurrences on that condition; and, lastly, remarks on the attitude of French public opinion towards unmarried pregnant women and comments on the institutions and associations existing for their benefit and assistance. In the earlier chapters, though mentioning sexual excitement, hot baths, horse-riding, bicycling, sea-voyaging, and railway travelling as possible and fairly frequent causes of abortion, the author makes no reference to the very numerous midwives in France who are really abortion-mongers and who ply their trade with little risk to themselves. Dr. Bouchacourt grieves greatly that so little is being done to combat the growing relative depopulation of France and urges that for the sake of the State every care ought to be taken of women who become pregnant. As things are, a poor woman who is *enceinte* probably finds her way to Paris or other large town and having been delivered there at the maternity charity elects to remain in the city rather than to face her people at home. At the present time idiots, cretins, deaf-mutes, degenerates, and epileptics are better looked after by the State than are the mothers of the future soldiers and citizens of France. The Academy of Medicine in 1891 recommended that an asylum for pregnant women should be built at the public cost in every department of France. In 1892 the Conseil Supérieur de l'Assistance Publique passed a resolution to the same effect. Up to the present time no steps have been taken in the matter by any of the public bodies, but an enterprising architect named M. Legriel has designed plans for maternity asylums and sanatoria which will be found at the end of the book. The descriptions of the plates are in the last few pages of the letterpress.

Annuaire des Eaux Minérales. By Dr. G. MORICE. Forty-third year. Paris: Librairie Maloine. 1901. Pp. 338. Price 1 fr. 50 c.—The editor of this handy little guide is the editor-in-chief of the *Gazette des Eaux*, and he thoroughly understands how much is wanted in a guide such as this one. There are the names of the members of the Public Health Committee, a long catalogue of spas and hydropathic establishments with their medical officers, an alphabetical list naming the physicians in France who engage in hydropathic work, a classification of the French mineral waters, and the French sanatoria for phthisis are also given. Under the name of each spa are given various particulars: the altitude in metres, brief descriptions of the chemical type of the mineral waters, the indications for their use, and details of travel to the place from Paris by rail. Most of the principal spas of foreign countries are also given, with a few particulars in each case. The British watering-places referred to are those of Bath, Buxton, Harrogate, Cheltenham, Leamington, Malvern, Matlock, Perth, and Tunbridge Wells. The guide should find a place on the study-table of every physician who prescribes hydro-therapeutic measures to his patients.

The Chronicle of a Cornish Garden. By HARRY ROBERTS. London: John Lane. Pp. 190. Price 5*s.*—Mr. Harry

Roberts, who is, though he does not say so on his title page, a medical man, has written a very charming book. He knows what a garden should be and has apparently made a pleasaunce out of most unpromising material; so his book is full of comfort for those who may hope to spend their later days in possession of a garden, however humble. Mr. Roberts gardens in the true spirit of a gardener, that spirit, we mean, which filled Campion and Marvell when they wrote about gardens and flowers—the spirit which makes a man look upon a garden as a retreat from care, as a companion, and as a source of pleasurable anticipation—an anticipation which is sometimes fulfilled despite the pessimism of that delightful little book "My Summer in a Garden." Given the opportunity, and there is no pleasure so cheap, so lasting, and so enjoyable as a garden. We should add that Mr. Roberts modestly refuses to illustrate his book with pictures of his own garden but instead supplies pictures of an ideal garden by F. L. B. Briggs.

On the Sterilisation of Milk: Its Advantages and Limitations. By A. D. BLACKADER, M.D., M.R.C.S. Edg. Pp. 12.—In this pamphlet, which is a reprint from the *New York Medical Journal* of Feb. 2nd, 1901, Dr. Blackader, Professor of Pharmacology and Therapeutics in McGill University, Montreal, strongly advocates the pasteurisation of cow's milk for infant feeding at a temperature not exceeding 60° C. (140° F.). He quotes various observers to the effect that at this temperature in closed vessels (but not in open vessels) 99 per cent. of all the bacteria present in milk are destroyed. At 70° C. (158° F.) milk acquires a more or less scalded taste and undoubtedly undergoes some chemical changes, probably the following: (1) its proteids are modified and rendered apparently less digestible; (2) the salts assume a condition in which they are less readily absorbed; and (3) natural ferments, the presence of which in milk may with much probability be inferred, are destroyed.

Cholecystitis complicating Typhoid Fever. By W. F. HAMILTON, M.D. Pp. 5.—In this pamphlet, reprinted from the *Montreal Medical Journal* for December, 1900, Dr. W. F. Hamilton, Lecturer in Medicine, McGill University, describes four cases of cholecystitis complicating typhoid fever occurring during 1900 in the wards of the Royal Victoria Hospital, Montreal. In three of them the first symptoms of cholecystitis showed themselves on the twenty-eighth, twenty-ninth, and thirtieth days of the disease, but in the fourth case on the seventy-second day. In two of them the abdomen was opened and the gall-bladder was found to contain calculi and to be necrosed in places; in the other two cases no operation was performed. All the patients recovered.

Sidmouth as a Health Resort. By A. MACINDOE, M.D. Glasg., D.P.H. Bristol: John Wright and Co. 1900. Pp. 68. Price 1*s.*—The reviewer who is experienced in the class of book a specimen of which is now before us, is struck by the fact that any given watering-place or health resort is superior to any other, if not in every way at least in most. Dr. Macindoe has, however, with rare self-restraint tried to show what Sidmouth is, and not to suggest what other places are not. Sidmouth is without doubt a very pleasant place and has the advantage of not being fashionable, in the sense that it is not haunted by the tripper. It is warm and sunny, well-drained, and has a good water-supply, and the reports of the county medical officer of health which are quoted by Dr. Macindoe show that the death-rate is low and that the sanitary policy of the authorities is very advanced. The sewerage of the town was almost entirely renewed at an expenditure of about £10,000 in 1897. To those who wish to read a clear account of a clean little town situated in the midst of beautiful scenery, Dr. Macindoe's *brochure* may be recommended.

New Inventions.

A HYGIENIC CLINICAL THERMOMETER.

THIS is a new departure in the form of clinical thermometer. The scale is not cut in the thermometer itself but in a glass case, which replaces the usual metal one. This renders the surface perfectly smooth so that it can be readily cleaned—undoubtedly a great gain. This advantage is somewhat detracted from by the trouble which is experienced by always having to replace the thermometer in the case before the temperature registered can be read off. The thermometer is made by Mr. Hicks of Hatton-garden, London, E.C.

A SIMPLE SELF-RETAINING UTERINE TENACULUM.

A UTERINE tenaculum is indispensable to the gynæcologist, but the holding of the same unfortunately monopolises the use of one hand completely. Having (no doubt with many others) experienced this inconvenience I have devised a simple plan of getting over the difficulty, and Messrs. Reynolds and Branson, Limited, of Leeds, have carried out the idea satisfactorily. The illustration represents the instrument, the greater part of the handle being made of flexible metal, which can be easily bent round either the pubes or sacrum after the necessary downward traction on the cervix has been made, assisting materially in the bimanual examination of the uterus and also the palpation of the posterior wall of the same through the rectum. The value of the tenaculum will be most appreciated in private practice where an assistant is not often to be had. If used through an ordinary cylindrical speculum it will not only hold the cervix but render the speculum self-retaining in addition.

Cheltenham. ALEXANDER DUKE, F.R.C.P. Irel.

HEALTH OF CHARD.—Mr. G. Barnes, the medical officer of health of Chard, in his annual report for 1900 states that the population of the town is estimated at 4500, with an area of 403 acres. The birth-rate was 26·8 per 1000 and the death-rate was 17·7 per 1000. Among infants under one year there were 22 deaths, giving a death-rate of 178·8 per 1000 children born.

THE HOSPITAL SATURDAY FUND.—The report of the council of this fund for 1900 is a satisfactory one. It shows that the total income was £20,280, being £267 in excess of the income for 1899 and £142 more than the amount collected in 1897, the last year when there was a street collection on behalf of the fund. The total sum distributed was £17,698. This amount has only been exceeded twice in the history of the fund—viz., in 1893 and 1896, when the amounts distributed were £17,778 and £18,110 respectively. 36 general hospitals received £6557; 57 special hospitals received £4932; and 74 dispensaries, convalescent homes, and miscellaneous institutions received £6209. The total number of patients sent to convalescent homes was 1165; of this number 812 were sent with free letters and 353 paid £354 towards the cost of their maintenance. The number of surgical appliances supplied was 3115, the cost being £2558; of this sum the recipients paid £1377. The expenses of management amounted to £2277. This sum is at the rate of 11·23 per cent., the lowest rate recorded with the exception of that for the preceding year, when it was 10·95.

THE LANCET.

LONDON: SATURDAY, APRIL 27, 1901.

The International Organisation of Science.

IN the past history of the world, and not so very long past, it could hardly be said that science knew no nationality, for political conditions worked so strongly to the disadvantage even of minds bent on unravelling scientific truths that no interchange of knowledge was possible. But fortunately now for the interests of science all this is being changed. The tendency among the scientific to sink all differences of nationality, creed, or race, and to cultivate a spirit of cosmopolitanism is recognised as natural. A spirit of scientific commonage is growing up amongst us which should make finally for peace and concord. One undoubted means towards the advancement of international scientific coöperation would be the publication of an international catalogue of scientific literature under the control of the civilised world's learned societies, and this step has been proposed and, moreover, is likely to be realised. Scientific literature has already done much to make science international by encouraging investigators of different nationality to work in harmonious relation with each other. But much as it has done literature cannot do all. What is wanted is an organisation the aim of which shall be international coöperation in all practical affairs that pertain to the pursuit of the truth; that shall promote an exchange of ideas as to the lines on which research will yield the most satisfactory results; and that shall influence the methods of scientific training. Such a movement would render science and civilisation a service of which it would be impossible to exaggerate the importance. The need for international coöperation in the study of the foundations of knowledge has long been felt, and it is satisfactory that we seem to be within measurable distance of the formation of the nucleus of such an organisation. An International Association of Learned Societies has now made a fair and promising start, and that the movement will bear fruit of the most important and cosmopolitan kind there is little doubt. Such a body is calculated to draw to its conferences not only the leading thinkers of the scientific world but the minds of the diplomatic and economical worlds also.

LAST week the first Congress of the International Association of Learned Societies met in Paris under the presidency of M. DARBOUX, the permanent secretary of the Paris Academy of Sciences, and there were present a group of famous men as representatives of science in Austria, Belgium, Denmark, England, France, Germany, Holland, Hungary, Italy, Russia, and Sweden—men who have revealed to the world some of the most marvellous secrets of nature. Thus there were in conference together in Paris such famous persons as M. BERTHELOT, M. MOISSAN, Sir MICHAEL FOSTER, Professor E. RAY LANKESTER, Sir ARCHIBALD GEIKIE, Sir NORMAN LOCKYER, Professor RÜCKER, Signor CANNIZZARO (the celebrated Italian chemist), Signor MOSSO, Dr. VAN'T HOFF (whose magnificent contributions to our knowledge of the nature of solution and the constitution of matter are so widely known), and Professor A. FISCHER (of Leipsic, the well-known botanist). The chief object of this conference of *savants* was, in the words of M. DARBOUX, that the man of science devoting his life to the most delicate or the most abstract researches may cease to feel himself isolated while still preserving that independence which is the greatest good and the primary need for the honest investigator. M. DARBOUX eloquently pointed out the splendour of the work that an international organisation of science could do by uniting in the different academies all those who are studying the same subject; by giving them, if they wish it, the opportunity of joining in a common work; by drawing the attention of different Governments to all the schemes the speedy realisation of which is necessary or desirable; and by indicating to Governments the means of executing these schemes in the most favourable conditions and with the greatest possible saving. If the great thinkers of the world can through the association get into touch with the people the association is destined to become rapidly one of the most powerful instruments of concord and of progress.

It is in the irony of things that the International Peace Conference at The Hague was shortly followed by one of the biggest wars into which this country has been plunged. And it may be that the international organisation of science will at first bring about a result diametrically opposite to that which had been hoped. Science tends to increase the ingenuity of fraudulent practices while it provides machinery for the maintenance of a higher standard of probity. It opens up greater possibilities of peace, yet at the same time it provides powers for the wholesale destruction of human life. Nitrogen is the most important constituent of our food and at the same time it is the essential element in the high explosive. Mr. NOBEL was probably the most prominent manufacturer and inventor of explosives that the world has seen and he acquired a massive fortune from his inventions. He left his great wealth to be distributed to those who could suggest the scheme that was best calculated to promote the peace of nations and the prevention of warfare, realising the strange paradox to which we have drawn attention. It is our conviction that science will ultimately triumph in bringing about the peace of the world, though there may be many centuries to wait for this consummation. And because this conviction is widespread among thoughtful people an annual international conference of scientific men has a deeper significance than at first sight would appear.

"Some Fallacies of Therapeutics."

UNDER the above title Dr. GEORGE L. PEABODY of New York has recently delivered an address to the Practitioners Society, which has been published in the *Medical Record* of New York and which we have read with much interest. Dr. PEABODY does not exaggerate when he says that in these

days we are in danger of being swamped by the multiplicity of devices to cure the ills of man. New remedies and new preparations of old remedies are devised in such profusion that the practitioner is tempted to make a constant succession of experiments on his patients and to take short cuts to cure diseases, in many of which there is an element of regularity and of time which cannot be ignored with impunity. Dr. PEABODY adduces several instances of what he considers the persistence of exploded ideas of the action of medicines. He even goes so far as to say that the latest editions of works on therapeutics are full of echoes of the past, repeating the errors and inconsistencies of the old editions and the older writers from a spirit of conservatism or inertia, as if we had no more accurate means of investigation to-day than our forefathers had generations ago. Certain illustrations which he gives of this tendency are worth quoting, but a cursory glance at some of the works of our later therapeutists which happen to be before us scarcely satisfies us that Dr. PEABODY is justified in his general censure.

Dr. PEABODY alludes to the use of bitters as appetisers as an example of traditional error. "Perhaps no idea in therapeutics," he says, "is more widespread or more generally acted upon than that bitter substances conduce to an improvement in the appetite, and certainly none is less susceptible of explanation or proof." He denies that the effect is due to the contact of the bitter substance with the mucous membrane of the stomach, and attributes it rather to a stimulation of the sense of taste leading to flow of saliva, which is known to excite the secretion of gastric juice. This view of the indirect action of bitters as appetisers through the increase of the salivary secretion is brought out in all the recent works to which we have referred. Dr. PEABODY also points out that in the vast majority of cases in which bitters are taken to increase appetite they are mixed with alcohol in some form, as in "the cocktail," in the class of "tonics and bitters," and in other seductive drinks, almost always, he says, sold as being non-alcoholic, but which are found upon examination to contain a large amount of alcohol. The Board of Massachusetts a few years ago found that of 47 of these preparations examined 46 contained more than 21 per cent. of alcohol. A preparation called "sulphur bitters" contained no sulphur and over 21 per cent. of alcohol, and one dealer's "sherry wine" bitters yielded 47 per cent. of alcohol. No doubt the action of such quantities of alcohol by irritating the mucous membrane might temporarily increase the appetite and stimulate the flow of gastric juice, but no physician would approve such "medicines" or expect anything but permanent mischief from them. Loss of appetite is due to a great variety of causes and is to be met by an equal variety of remedies, amongst which the mere administration of bitters we should regard as the least important and the most doubtful. It is generally due to some defect of health or some neglect of hygiene or some error of habit which the true physician will take trouble to find out. In detecting and explaining such a cause he will do his patient the greatest possible service. But certainly the mere administration of a bitter to a patient suffering from loss of appetite will often be the worst possible treatment. Another illustration given by Dr. PEABODY of the survival of false notions among the laity, and even sometimes among their professional advisers, is with regard to the action of alcohol. He finds both among medical men and their patients a lack of due recognition of the injurious action of alcohol on "the heart, arteries, and tissues generally" of persons who have the reputation of never having been drunk in their lives.

"Investigation of such cases has often shown that the patient has been a steady and persistent and even hard drinker who always drank more alcohol than he could possibly oxidise, whose heart, arteries, stomach, liver, kidneys, and brain all showed evidence of degenerative changes directly due to alcohol, the victim himself and his friends honestly believing that the limits of temperance had never been overstepped because he never got drunk. It is not surprising that this should be the lay measure of the possible evils of alcohol, but that doctors should share such a belief and sanction indulgence in spirits accordingly, is truly deplorable."

Dr. PEABODY, in further illustration of what he considers to be "the survival of errors in therapeutics, refers to the question of the efficacy of creasote and boric acid as germicides, of calomel as a stimulant of the liver, of lithium as a solvent of uric acid, of iodide of potassium as an effective eliminant in lead-poisoning, and of the too indiscriminate use of the inhalation of oxygen. While admitting that he sounds a needed caution to medical men, and even to writers on materia medica, not to be too much bound to old beliefs, we think that he scarcely allows sufficient credit to observers for discrimination and advance in therapeutic reasoning. The fact is that we have not yet sufficient material for a system of therapeutics based on strictly scientific principles. The medical practitioner, while deeply sensible of his obligations to those who in a spirit of research study the action of drugs and of their active principles, has to act in the emergencies of disease according to his own lights. He cannot and does not expect to find in any manual of therapeutics a compendium of medical dicta by following which his personal responsibility for the treatment of his patient would be lessened. But he is most anxious for therapeutical suggestions, based, not upon tradition, but upon the collated results of medical practice. This is what Dr. PEABODY thinks he is not properly supplied with.

The South African Honours Gazette.

THE long-expected *Gazette* of honours and promotions for services in the South African war has made its appearance. It is probably the longest *Gazette* ever published, but it nevertheless only extends to the time when Lord ROBERTS handed over his command to Lord KITCHENER, to whose lot it has fallen, at an extremely difficult and arduous phase of the campaign, to conduct affairs to a successful issue. Lord KITCHENER will then have his own recommendations to make regarding the honours and distinctions which have still to be given, so that an obvious opportunity will soon occur for the rectifying of omissions. Appointments to the Order of the Bath, the Order of Saint Michael and Saint George, and the Distinguished Service Order fill sixteen and a half columns of the *Gazette*, and

the promotions fill seven and a half, while there is an appendix of five more. It can be claimed as a whole for the latest award of honours and distinctions that these have been freely bestowed. So large an army has been engaged for so long a time over so huge an area that it is impossible that all exceptionally good work wherever done can have received recognition. Legitimate disappointment will undoubtedly be felt in some quarters, but with one notable exception the *Gazette* is a generous one. The exception leaps to the eyes. The name of the head of the Army Medical Service is conspicuous by its absence. As if to accentuate the fact we find that Sir HENRY BRACKENBURY and Sir C. MANSFIELD CLARKE, the Director-General of Ordnance and the Quartermaster-General respectively, receive the Grand Cross of the Bath. We are at a loss to conceive how the omission is to be explained. The Director-General made every provision in his power for the hospital service in South Africa. It was no possible fault of his that the war attained the magnitude that it did and assumed a character which neither the military authorities nor the nation, indeed, foresaw it would assume. He did not fail to point out beforehand any shortcomings that existed, and the Royal Commissioners in their report expressly acquit him and the staff of officers associated with him of all blame in the matter. We are consequently, as we have already said, entirely at a loss to understand the omission of his name from the *Gazette* and fail to see any justification for it. Even apart from all other and higher considerations the unwisdom of such partiality at the present time must be obvious, and it is, in our opinion, greatly to be deplored in the interests of the army and of the State. It can hardly be expected that the Royal Army Medical Corps will be other than an unpopular service when its officers and the medical profession see the representative head of it studiously ignored in so marked a way. Speaking generally, the Army Medical Service and its officers in the field, and those who have been connected or who have done duty with it in South Africa, have, we are glad to notice, had their services recognised. It is needless to repeat here all the names, which will be found in another column, but we may select for special notice those of Captain NICKERSON, R.A.M.C., and Captain INKSON, R.A.M.C., who, as previously chronicled in our columns, have received the Victoria Cross, making with Lieutenant-Colonel BABTIE, R.A.M.C., and Captain DOUGLAS, R.A.M.C., a total of four Victoria Crosses gained by their corps in the South African War. We are glad to observe also that Captain DUKA, of the Army Medical Corps, Queensland Defence Force, whose conduct at Elands river was lauded by all the defenders of that post, has been awarded a Distinguished Service Order.

We sincerely congratulate all the recipients upon their well-earned honours; but we cannot congratulate the authorities upon the *Gazette* as a whole because its fairness is so grievously marred by the omission of the name of the Director-General of the Army Medical Service.

THE GROCERS' RESEARCH SCHOLARSHIPS.—Applications for the Grocers' Livery Company's Medical Research Scholarships (value £250 each) should be made by letter to the Clerk of the Company, Grocers' Hall, Princes-street, E.C., during the present month.

Annotations.

"Ne quid nimis.

THE QUALITY OF TEA.

IT is being pretty freely stated that unwholesome tea is being imported into this country in large quantities and it is urged that steps should be taken to check the importation of inferior teas by closing the doors of the Custom House against their sale. The deterioration of the quality of tea is said to be owing to the introduction of machinery for tea-making, a process which produces a very inferior article compared with hand-made tea. Thus there is very little machine-made tea now which can be compared with the old finest quality China tea. The explanation of this lies, according to a tea-planter, in the inefficiency of machinery in its earlier stages of development to imitate the finesse of a skilful hand craftsman in carrying through a series of delicate operations. The difficulty arises, of course, from the fact that it is one thing to make a specimen article at a high price for the few and another to make it for the masses by the ton, and the grower is sure to be in favour of producing quantity rather than quality. It is said that millions of pounds of decomposing leaf are made into tea simply because many factories are insufficiently equipped. Tea undoubtedly requires delicate handling during the progressive stages of its manufacture. The methods of treatment, unless efficiently conducted, are necessarily hazardous to the quality of the final product. The leaf, of course, has to be plucked, then withered, rolled, and finally "fired" or dried. It is obvious that any one of these processes might involve injury to the quality of the tea, and the enormous scale on which tea is prepared for the market would have a tendency to introduce inefficient treatment at some stage or other. It is the same story as in so many things—the machine-made article can never compare with that made by hand. But any deliberate tampering with tea should be instantly stopped. It is said that modern processes frequently set up secondary fermentations, the true aroma of tea being thereby lost and replaced by the musty smell of mucic fermentation. We should have thought that these changes would have made the tea so nasty that no one would drink it. There can be no question, however, that we hear much more frequently than hitherto the expression, "I cannot drink tea," and whether or not this is connected with the enormously increased output of tea and the necessarily rapid means employed for its manufacture is an interesting and important question.

THE BUDGET.

IT is without doubt being brought forcibly home to the people of this country that war is an expensive method of settling disputes. Into the question of who is responsible, and therefore who should pay, for the present war, we shall not enter, but the fact is that money has to be found somehow, and those who have to find it naturally do not like the process. Income-tax presses heavily upon many of us; in fact, if we may believe the statements made by correspondents in the columns of the *Standard*, such a tyrannical tax has never existed since the day of ship money. On the other hand, a correspondent of the *Daily News* of April 24th sheds bitter tears over sugar. "Are Jingo and bully synonyms? The sugar tax does not affect the working man. ..... It means that the women will have to pay at least 1*s.* to 2*s.* more a week while the little ones will have to do without their sweeties,

in many cases the only thing to brighten their little lives." This letter gives a wonderful picture of the working man's home. We believe that the new duty on sugar will add one halfpenny per pound to the retail price. According, therefore, to the *Daily News* correspondent the average working man and his family consume from 24 to 48 pounds of sugar, including treacle and jam, per week. No wonder that the out-patient departments of hospitals are crowded with dyspeptics. As to income-tax, it may be allowed for certain, we think, that incomes arising from inherited property should be taxed at a much higher rate than a man's earnings.

THE TRAFFIC IN OLD HORSES.

IN another column will be found a letter from Mr. John Colam, the secretary to the Royal Society for the Prevention of Cruelty to Animals, dealing with an annotation on the above subject in THE LANCET of April 13th, p. 1095. Mr. Colam's letter is somewhat elliptical, but we presume that he wishes to imply that the order of the Board of Agriculture which we quoted does not apply to horses while on the way to the boat, but only when they are at the wharf or on board. Otherwise why does not his society proceed under an order by which heavier penalties can be exacted than under the Cruelty to Animals Act? Is it because persons convicted of travelling lame or infirm horses through the streets, albeit such horses are on the way to a boat for shipment, cannot be punished under the order in question? It is always a perilous task to try to put a meaning to Acts of Parliament or to orders of Government departments. But to our minds the order of the Board of Agriculture concerning the exportation of horses certainly considers them while in the streets of the port of arrival. The order distinctly lays down the illegality of conveying in a vessel from any port in Great Britain "any horse which ..... cannot be so conveyed without cruelty during the intended passage *and on landing*" (the italics are ours). Surely these last three words must mean conveyance or passage from the ship to the slaughter-house or sausage factory. Surely, then, the order would also refer to the conveyance of horses from the market or other starting place to the ship at the port of departure.

EPILEPSY AND CRIME.

DR. JOHN BAKER, deputy superintendent of the Broadmoor Asylum for Criminal Lunatics, has published an interesting paper on Epilepsy and Crime in the April number of the *Journal of Mental Science*. Regarding epilepsy as a functional degenerative neurosis, characterised by motor, sensory, or psychical convulsions, the following types of epilepsy are recognised—viz., epilepsia major (*grand mal*) and epilepsia minor (*petit mal*), either of which may be associated with abnormal mental states occurring in close association with the fits or independently; and psychical epilepsy without motor convulsions. With regard to the co-existence of epilepsy with perfect sanity it is noted that whereas nearly half of all cases of epilepsy are sane, yet a tendency to mental enfeeblement is always threatened even in these cases. Epilepsy is common among the criminal classes. Thus Ottolenghi found that out of 265 criminals 80 were epileptic. Of these no less than 78 are described as cases of psychical epilepsy and they were variously denominated—vertiginous, unconscious, and automatic with or without violence. Dr. Baker thinks that pure psychical epilepsy, without any kind of motor convulsions, is so rare that its employment as a defence for crime must be regarded with great suspicion. Since the opening of Broadmoor Asylum in 1863 the number of patients admitted has been 2435—viz., 1860 males and 575 females. Of these 139 males and 26 females are described as epileptic. The crimes and offences committed were in order of frequency as follows: murder 66 instances, attempts to murder 41, larceny 28, arson seven, and burglary six. The remaining crimes included manslaughter, rape, forgery, and other offences. A marked disproportion exists between the epileptics of both sexes as regards the tendency to crime. The proportion of male epileptics who commit crime is much above the proportion of females. This may be due partly to the fact that the psychical activity of man is greater than that of woman, or, as Lombroso avers, to the tendency which the disease, when existent in women, has to assume the form of wantonness, which, however reprehensible in itself, is less dangerous and does not lead to sensational crimes requiring imprisonment. Moreover, as Tonnini remarks, epilepsy in women has a greater liability to cause imbecility and mental enfeeblement rather than the more active and dangerous form of insanity. Thus out of the small number of female epileptics present in Broadmoor Asylum in 1890 more than half display this tendency to mental enfeeblement without violence, not because of age and infirmity, but simply as a characteristic of the disease. The remainder retain their impulsive and dangerous propensities. Homicide is mostly committed during post-epileptic automatism or post-epileptic furor, and there may be total or partial amnesia as regards the deed when normal consciousness is regained.

GARBAGE-MONGERS.

WALTER POWELL of Taff's Well, Caerphilly, is a butcher, and according to his own account is a young man in business, newly married, and has his character to make. Unfortunately, Mr. Powell's methods of character-making have brought him into contact with the law, for recently he was summoned at the Llandaff Police-court for exposing for sale meat unfit for human food, and also for selling horseflesh without giving proper notice to the public. A quantity of meat, both beef and horseflesh, the whole weighing 187 lb., was seized in the defendant's shop, and upon being condemned by a magistrate was destroyed. It was all unfit for food. Defendant's brother was seen to fetch the horseflesh from the knacker's and bring it to the shop, where the defendant took it and carried it into the shop. It must be said in defendant's favour that when the police and the medical officer arrived that he made no attempt to hinder them from inspecting his meat. The magistrates, we are glad to see, did not inflict a fine but sent defendant to prison for three months. For this period of time he will, at any rate, be fed with wholesome food despite his anxiety to poison his fellow creatures. We do not know what the occupation of Mr. Brinley Powell, the brother, may be, but he certainly aided and abetted his brother in his iniquitous action, and we trust that the authorities will keep an eye upon him. We may add that defendant confessed that he gave 2*d*. per pound for the horseflesh and sold it for 5*d*. per pound, thus making a handsome profit.

THE DEPOSIT OF THE THERMAL SPRINGS AT BATH.

THE chemistry of the thermal springs of Bath was discussed at some length in the report of THE LANCET Analytical Commission of Oct. 14th, 1899, p. 1068. In this report a series of analyses of the three historic springs was given and our Commissioners obtained some fresh results, showing amongst other things the presence of two constituents not hitherto recorded. We have since received specimens of a deposit found in the main pipe of the spring known as "the Hot Spring." As this pipe has not been opened for about 20 years the examination of this deposit should be of interest. The deposit presents the appearance of the ordinary incrustation obtained in boilers. Here and there the deposit was streaked with green which proved to be due to copper, an observation which would tend to confirm an analysis made

by Sir Henry Roscoe of the Bath waters when he reported a trace of copper. The complete analysis of the deposit was as follows:—

Moisture	5·84 per cent.
Organic matter	1·30 ,,
Silica	1·48 ,,
Iron (oxide)	1·20 ,,
Calcium sulphate	6·49 ,,
Calcium carbonate	83·04 ,,
Magnesium carbonate	0·65 ,,
	100·00 ,,

It will be seen that broadly the deposit consists chiefly of chalk with a little sulphate of lime. Spectroscopic analysis did not disclose any rare constituents, but of course any rare constituents in the water would most probably be soluble. As a matter of fact, in previous analyses of the water we found distinct evidences of the presence of lithia, strontia, and bromine.

A NEW CANCER HOSPITAL IN MOSCOW.

AN institution for the exclusive treatment of patients suffering from the various forms of cancer (either curable or incurable) is being built at Moscow at the expense, which is said to be an enormous one, of the municipality of that city. It is understood, however, that the main object which prompted the decision of the municipal authorities of Moscow of erecting a special hospital for cancer is to provide the necessary means for studying the nature of the disease from every possible point of view, and thus to encourage and to enable more thorough pathological and clinical research to be carried out in connexion with that malady. It is hoped that by carefully conducted scientific investigations the light of knowledge will be thrown upon a scourge which has of late years, and particularly in the northern regions of the Russian Empire, assumed a most formidable extent and character. The new institute, it is stated, will be under the entire management of a committee consisting of several members of the medical faculty with Dr. Lewschin, professor of surgery in the University of Moscow, as its Director; moreover, it is announced that special facilities will be offered to such students, desirous of joining the scientific circle of investigators there, who have already proved themselves good workers in that department of pathological research. In addition a special journal will be published by a committee selected for that purpose; it will bear the name of the said institute and will be entirely devoted to its scientific and social interests.

PROFUSE HÆMATEMESIS AND SYMPTOMS OF GASTRIC PERFORATION WITHOUT DISCOVERABLE LESION AT THE NECROPSY.

MR. MAYO ROBSON has recently called attention to the curious fact that after hæmatemesis, so severe as to be fatal, careful post-mortem examination may fail to reveal any lesion to account for the hæmorrhage.[1] The following case recorded in the *Intercolonial Medical Journal of Australasia* by Dr. H. G. Chapman is an example. A domestic servant, aged 27 years, was admitted to hospital on Nov. 24th, 1900, complaining of great weakness and vomiting. Two days before admission she had vomited a basinful of blood. She had been under treatment for gastric ulcer for 17 weeks. She was extremely anæmic and weak. She had taken nothing by the mouth except ice for two days. The pulse was 120. The abdomen was tender in the upper part and there were some rigidity and retraction. She was fed for two days on nutrient enemata. An attempt to give milk and soda-water produced vomiting and was abandoned. About one o'clock on Dec. 6th she was suddenly seized with pain which was followed by vomiting. At 3 P.M. there were slight distension and marked rigidity of the abdomen. Liver dulness was completely lost. The patient was collapsed and perspiring freely. Perforation was diagnosed and laparotomy was performed at 5 P.M. The stomach was brought entirely outside the abdomen but no abnormality could be found. A search for perforation of other viscera revealed nothing. The wound was closed and a large brandy and saline enema was given. The patient did not rally but vomited "coffee-ground" material for some hours. She was given strychnine and digitalin hypodermically and saline and brandy enemata every four hours. On the evening of the next day 1500 cubic centimetres of saline solution were infused into the median basilic vein. She never rallied and died early on Dec. 9th. Though the alimentary canal was carefully examined from the œsophagus to the sigmoid flexure no ulcer or abrasion could be found. In the stomach were dark brown fluid and a few clots. There was no sign of peritonitis. Slight degenerative changes in the shape of yellow patches in the aorta and on the aortic valves were found. It was thought that specific arteritis was present and that a small vessel had ruptured into the stomach causing the hæmorrhage. But the cause of the final attack which simulated gastric perforation remains quite unexplained.

[1] THE LANCET, Feb. 9th, 1901, p. 375.

ARSENIC IN STOCKINGS.

WE print an interesting communication this week in which it is shown that arsenic sometimes occurs in dyed stockings. Indeed, dermatitis has been traced to the wearing of stockings containing arsenic. The arsenic appeared to be present partly in a soluble and partly in an insoluble form. In an article in THE LANCET of Oct. 28th, 1899, p. 1186, we ourselves directed attention to the curious list of mineral substances that were found in dress materials. We failed, however, to find arsenic in any one specimen of the material submitted to examination, although we found present salts of zinc, aluminium, chromium, tin, magnesium, and iron. In one case, that of pink flannel, the material was loaded with Epsom salts. The materials examined were all more or less brilliantly coloured with aniline dyes. In recording the results of this inquiry we remarked that from time to time dermatitis had been referred to the use of highly dyed fabrics, and although dyes may not be injurious *per se*, yet certain poisonous agents, such as mordants, may be used in their preparation. Thus arsenic is largely used in colour making and dyeing and the poisonous metal has been found in small quantity in coloured dress fabrics. As we have said, we failed to detect arsenic in the materials, but in spite of the fact that all the aniline colours coming from Germany have been free from arsenic since the passing of a law in 1887 there would appear to be now, in the light of this recent inquiry, a recrudescence of the employment of arsenic in the dyes used, at any rate in stockings. This fact only shows what a sharp watch must be perpetually kept up in order to check an objectionable practice. There can be little doubt that in the cases cited the arsenic in the stockings was introduced through the dye. It appears to us that it should be the rule of the dyer to obtain a guarantee from the maker of the dye that it is free from arsenic altogether or at any rate as free as it is possible to be made by the best known process of elimination. It would seem that the employment of arsenic and its compounds, or of substances contaminated with arsenic, will inevitably have to be placed under special regulations, for apparently the presence of arsenic is unavoidable in a very great number of materials. The Royal

Commission on arsenic should include in their inquiry the question of the danger arising not only from arsenical food products but from arsenical clothing also, and should decide upon the limitations of the amounts of arsenic in any case.

THE ASSAULT ON A COMMISSIONER IN LUNACY.

ON Tuesday, April 16th, two of the Commissioners in Lunacy, Mr. G. H. Urmson (legal) and Dr. Sidney Coupland (medical), were paying the annual visit of inspection to the London County Asylum, the Heath, Bexley, when in Male Ward J. 2 a patient made a homicidal attempt on Mr. Urmson. Mr. Urmson, after visiting the patients and conversing with them, had re-entered the ward to ascertain if the numbers were correct when he received a violent blow upon the lower jaw, the weapon being the broken blade of a rusty table knife about two inches in length. Mr. Urmson had fortunately half turned round so that the blow did not fall on the neck as the patient had intended but upon the jaw. The wound, which was about one and a half inches long, bled freely, and was immediately treated by Dr. C. H. Bond, the senior assistant medical officer, who was acting as deputy for the medical superintendent, Dr. T. E. K. Stansfield. The wound has rapidly healed without any complications. As regards the motive of the attack, it appears that the assailant had taken a dislike to one of the members of the Visiting Committee and had secreted the implement until occasion should serve for him to use it against that gentleman. But learning that the Commissioners were in the building he thought it an opportunity to use his weapon. He seems to have mistaken Mr. Urmson for one of the Prison Commissioners who had visited him when he was confined in Parkhurst Prison previously to his admission into the asylum, and when Mr. Urmson's attention was drawn away dealt him a blow which, but for a happy sudden movement on the latter's part, might have had fatal results. It should be added that all the patients are regularly searched, but in this instance the man had placed the weapon in hiding and had only withdrawn it shortly before he used it. The assault on Mr. Urmson has many features in common with the fatal assault on Mr. Lutwidge, a legal Commissioner in Lunacy, which took place at Fisherton House Asylum nearly 30 years ago. Mr. Lutwidge was suddenly attacked by a criminal lunatic while making a visit of inspection at Fisherton House, the weapon, a nail which had been secreted by the murderer some time beforehand, being driven with one furious blow through the squamous portion of the temporal bone into the right hemisphere. Mr. Urmson seems to have narrowly escaped a similar dreadful fate, only the circumstance that he turned his head just as the blow was being struck saving the great vessels of the neck from injury that probably would have been fatal. We are glad to learn that Mr. Urmson has progressed so favourably and we congratulate him heartily on his providential escape.

ON CERTAIN NERVOUS CONDITIONS ASSOCIATED WITH ENTEROPTOSIS.

DR. JAMES ARNEILL in a paper published in the April number of the *American Journal of the Medical Sciences* refers to the frequency and importance of a group of nervous symptoms associated with enteroptosis and usually met with in anæmic and neurasthenic individuals of both sexes. The age of the patient was generally above 20 years, but after the climacteric period in women or the age of 60 years in men these cases were rare. Gastroptosis usually coexisted with enteroptosis, and both were due to a relaxation and atony of the peritoneal attachments of the stomach, small intestines, and colon arising from feeble innervation. The mental symptoms consisted of depression and tendencies to melancholia, nervous irritability, and a proneness to hysterical manifestations. From a detailed study of 80 cases Dr. Arneill concluded with Meinert that in a large proportion chlorosis was also present, though he could not accept the latter condition as the cause. An undue laxity of the tenth rib—the "costal stigma" of Stiller—characterised nearly all cases, and in many cases "nervous dyspepsia" was present. Many patients had a tendency to hypochondriasis and went from one physician to another. They suffered from general muscular atony even when appearing plump and well-nourished, were lacking in energy, and were easily tired. On examination of the abdomen while in the standing posture there was a sinking in of the epigastrium, while the abdomen was unduly prominent and big below the navel. Palpitation was common and in some a pulsating and tender aorta was observed. Inflation of the stomach with carbon dioxide gas—by administering tartaric acid and bicarbonate of soda—showed that the organ was displaced downwards. Dr. Arneill states that in congenital cases of enteroptosis hyperacidity of the stomach was the rule. Blood examination of 23 cases showed that one was normal, nine were chlorotic, and 13 were anæmic but not chlorotic. Many of the female patients suffered from "floating" kidney or displacements of the uterus and in the former case operations had not infrequently been performed but benefit seldom resulted. Treatment consisted in massage of the abdominal muscles, properly devised mechanical support of the abdomen, lavage of the stomach and administration of hydrochloric acid in cases of subacidity, and the administration of tincture of nux vomica. Aggravated cases required prolonged rest and special treatment suitable to the degree of neurasthenia present. Special conditions, such as intestinal obstruction and pelvic troubles in women, called for special treatment.

THE COUNTESS OF DUFFERIN'S FUND.

THE National Association for Supplying Female Medical Aid to the Women of India has been the means of relieving much suffering among the vast populations of our Indian possessions, and we are happy to see that its philanthropic work is being more and more appreciated by those whom it seeks to benefit. Its sixteenth annual report, dealing with the events of the year 1900, is issued by the Office of the Superintendent of Government Printing in Calcutta and forms with its 12 appendices a volume of 190 closely printed pages. The statistical part shows that during the year 1900 in India 1,667,329 women received medical treatment in 247 hospitals officered by women, the distribution of cases being as follows:—A. Patients treated in hospitals wholly maintained by the Association: in-patients, 7184; out-patients at the hospitals, 211,904; treated at home, 1635. B. Patients treated in hospitals aided by the Association: in-patients, 9450; out-patients at the hospitals, 258,300; treated at home, 2712. C. Patients treated in hospitals maintained from other sources—i.e., independently of the two sources indicated under A and B: in-patients, 26,028; out-patients at the hospitals, 1,136 804; treated at home, 13,312. The staff employed in the various hospitals for women throughout India includes 37 medical women of the first grade—i.e., persons qualified for registration in the United Kingdom. The names and qualifications of these ladies, together with the names of the hospitals where they are stationed are given in full, and the report is embellished with portraits of six of them. In addition to them there are also 80 assistant surgeons or practitioners of the second grade who have been trained in India and hold Indian qualifications, and 289 female hospital assistants and diplomates in midwifery filling appointments. The appendices contain much information as to the medical education of women in the United Kingdom and in India, together with particulars of the medals, scholarships, and

prizes for which students are eligible. For the large number of Indian women who are debarred by religious and social prejudices from consulting male practitioners the action of the Association is of inestimable benefit.

THE SALARY OF THE MEDICAL OFFICER TO THE DAVENTRY WORKHOUSE.

MR. C. E. OLDACRES, the medical officer of the Daventry Workhouse, has been refused an increase of salary and has resigned his post under circumstances which should make other medical men pause before they apply for the vacancy. Mr. Oldacres has held office for 10 years at a salary of £30 per annum. On a previous occasion a rise in salary was refused to him because the work was said not to have become heavier since he accepted office. It is apparently not denied that the work is now harder, but the authorities will not give Mr. Oldacres the £50 per annum which is the least sum for which in justice to himself he can discharge the duties of the appointments.

VETERINARY WORK IN BENGAL.

IN the annual report of the Bengal Veterinary College and of the Civil Veterinary Department, Bengal, for the year 1899–1900, much information is given as to the prevalence of disease among domestic animals in and around Calcutta. Glanders appears to exist to an alarming extent; out of 188 draught ponies in the municipal Gowkhanas in Calcutta 102 were destroyed on this account. The stables in which the ponies were kept were described as being unsatisfactory, and Veterinary-Major F. Raymond, F.R.C.V.S., of the Civil Veterinary Department, had recommended that all the ponies should be tested with mallein, those that failed to pass the test being destroyed. Rinderpest also was fatal in an unusual degree. In one district alone it was reported to have carried off 27,000 head of cattle. The report gives details of the inoculation of cattle with bile on the Aligarh dairy farm, where rinderpest broke out on April 16th, 1899. Inoculation began on May 13th and the outbreak ceased on June 7th. The herd consisted of about 388 animals. 65 animals died before the inoculations, 15 died while the inoculations were progressing, six developed the disease a few days after they had been inoculated, and three contracted the disease about 10 months after the inoculation, during another outbreak. Altogether 291 animals, mostly cows, were inoculated; of these 70 buffaloes and 26 Zebu cows were in calf; but none of them aborted as a result of the treatment. Six developed rinderpest after inoculation (three died and three recovered). Five were possibly infected at the time of inoculation, but this did not apply to the sixth which was attacked 22 days after inoculation. The manager of the farm thought that the outbreak had been stopped by the bile treatment. Three of the cattle inoculated in May, 1899, died from rinderpest in March, 1900, from which it may be inferred that the buffalo bile treatment had been protective for 10 months.

A NEW PUBLIC HEALTH BILL.

A BILL dealing with the status of officers of health has been brought in by Sir Francis Powell and others and was ordered by the House of Commons to be printed on April 2nd. The text of the Bill is now before us and a memorandum appended to it states that the main objects of the Bill are to ensure that none but those properly qualified shall be appointed as officers of health and to give them the same amount of security in their tenure of office as prevails in Scotland, and as Poor-law medical officers possess in England and medical officers of health have in the metropolis. The Bill also deals with the question of superannuation allowances and proposes that the term "sanitary inspector" shall be universally used in place of "inspector of nuisances." The memorandum also points out that under existing laws urban and rural sanitary authorities may appoint officers of health on such conditions as to qualifications and tenure of office as they think fit. But highly technical duties are required of sanitary inspectors and one object of the Bill is to secure that they should be duly qualified. The term "officer of health," as used in the Bill, includes a medical officer of health, an inspector of nuisances, a sanitary inspector under the Public Health Acts of 1875 and 1891, or either of them, and a district or assistant sanitary inspector. The Bill shall come into operation from, and immediately after, Sept. 29th, 1901. The qualifications of an officer of health under the Bill are to be a certificate of the Local Government Board, or from some body approved by that Board, that he has shown himself by examination competent for office or that he has for three consecutive years before the commencement of the Act served as an officer of health. An officer of health may be suspended by a local authority at their discretion, and an officer of health may resign on giving one month's notice in writing. The whole Bill consists of 32 clauses. It is backed by, amongst others, Sir Walter Foster, Dr. Farquharson, and Sir Michael Foster.

EPISTAXIS IN PEOPLE BEYOND MIDDLE AGE.

A PAPER which we published in THE LANCET of April 20th, p. 1133, by Dr. George Coates, entitled "On the Causation and Treatment of Profuse Epistaxis in People beyond Middle Age," presents many points of interest. The effects of continued high arterial tension are frequently overlooked, or the resulting symptoms are attributed to other causes. One of the consequences of high tension is hæmorrhage, frequently from the lungs, but always from the relatively weakest point, and, as Dr. Coates expresses it, "it is probable that the venous sinuses in the noses of these sufferers from epistaxis have very thin walls." Dr. Coates considers that the sequence of events which lead up to the epistaxis is as follows: (*a*) long-continued high arterial pressure; (*b*) some sudden cardiac failure; (*c*) overfilling of the whole venous system, the weakened heart not being able sufficiently to empty the engorged veins against the high pressure in the arterial system due to contracted arterioles; and (*d*) leakage from an overfilled vein. Dr. Coates deduces these causes from five cases, giving a very brief account of each. We wish that he had given some more details, especially in regard to previous history. He mentions, however, that he had known and watched all the patients for several years both before and after the attack; therefore his remarks on the condition of the heart are of considerable value. Three out of the five cases "developed" valvular mischief coincidently with the attack of epistaxis. It is a well-recognised fact that prolonged exercise tends to lower arterial pressure, but during the first stages of muscular exertion the range of blood-pressure is high, especially in those persons unaccustomed to severe exercise. But in the cases mentioned by Dr. Coates there is no information as to whether there was a history of any physical strain immediately preceding the epistaxis and valvular failure. In heart-strain the valve that most usually suffers is the aortic and it is singular that in two out of the three cases in which there was valvular mischief, the mitral valve should have given way. The treatment adopted by Dr. Coates was perfectly rational. As a rule, in cases of epistaxis plugging the nares is at once resorted to, without sufficient attention being directed to the conditions causing the hæmorrhage. By giving nitro-glycerine the general blood-pressure was

lowered, consequently the over-distended venous system was relieved and the epistaxis ceased, and Dr. Coates rightly remarks that "the immediate treatment must be directed to the capillaries and small arteries, as the real cause of the epistaxis lies there, not in the nose." Measures may subsequently be taken to improve the condition of the heart.

RETIREMENT OF DR. BROUARDEL.

PROFESSOR BROUARDEL, the Dean of the Paris Faculty of Medicine, has announced that at the end of his present term of office—namely, in February, 1902—he will not accept re-appointment. This announcement has profoundly moved not only the medical profession but also the general public among whom Dr. Brouardel is well known and very popular. All sorts of reasons are given for his retirement, but his own reason for the step is simply that he is tired and considers that he has earned a right to rest.

"THE ROYAL ORTHOPÆDIC HOSPITAL."

WITH reference to our editorial note to Mr. H. H. Marks's letter on the above subject published in our issue of last week, p. 1167, we think it right to inform our readers that we have received another letter from Mr. Marks in which he supplies an answer to our question, but as he has requested, "in the interests of the hospital, that it should not be made public," we are of course precluded from expressing any opinion with regard to the information with which he has supplied us.

THE BIRMINGHAM CONSULTATIVE MEDICAL AND SURGICAL INSTITUTION.

IN our issue of March 16th, p. 805, we noted that those interested in the above institution had determined to secure a successor to Dr. H. Ward Irvine. We now see by an advertisement which the honorary secretary of the institution has sent us, and which we have not inserted, that the committee want two successors—a physician and a surgeon. A minimum salary is guaranteed and private practice is debarred. The Birmingham Consultative Institution is therefore now nothing more than a medical aid society. Its governing body consists of a committee of laymen who wish to keep two medical men to do medical work for them. We await the result of the advertisement in the lay press with interest.

EPIDERMOLYSIS BULLOSA HEREDITARIA.

IN the April number of the *Maryland Medical Journal* Dr. Henry L. Smith of Baltimore describes what he regards as the first recorded case of epidermolysis bullosa hereditaria occurring in the negro. This disease has been observed many times in white races, the earliest reference given in Dr. Smith's list of authorities being to Dr. Tilbury Fox's "Notes on Unusual or Rare Forms of Skin Disease," published at intervals in the first volume of THE LANCET for 1879. Various names have been given to this condition; the one adopted here seems to have been first employed by Köbner, writing in the *Deutsche Medicinische Wochenschrift* in 1886. Dr. Smith's patient was a mulatto girl, aged seven years, who had since early infancy been subject to a breaking-out of water-blisters on her hands, feet, buttocks, and scalp. The eruption began as small, itching pimples, which were rapidly transformed into tense vesicles varying in size from that of a small pea to that of a pullet's egg. They remained about one week before breaking, and after drying up left a brownish discolouration but no scar. These blisters were numerous in the warm weather of spring and summer, and they rarely appeared during the winter. The father, who gave the history, had since his earliest recollection been at times a sufferer from the disorder. His mother had been also similarly affected. His wife had never miscarried and was the mother of eight children, three of whom—two brothers and one sister of the patient—had at intervals since their birth had the eruption. A microscopical examination of the blood and the contents of the vesicles was made by Dr. T. R. Brown of Baltimore, who found that there was both a general and a local eosinophilia.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC.

ARRANGEMENTS are being made for a conversazione at the Medical Graduates' College and Polyclinic, 22, Chenies-street, next Wednesday evening. The reception by the President, Sir William Broadbent, will take place at 8 P.M., and some brief lectures will commence at 8.30 P.M. Amongst those announced to lecture are Mr. James Cantlie and Mr. Hutchinson. The latter will take as his topics (1) the Retention of their Leaves through Winter by Deciduous Trees, and (2) the Suppression of One Tusk in Elephants. The clinical museum will be open, and there will be displays of surgical instruments and other objects of interest. We understand that all members of the profession will be welcomed, especially strangers in London. The arrangements are in the hands of Captain A. E. Hayward Pinch, F.R.C.S. Eng., to whom, at the above address, all communications should be addressed.

DURING the summer session Dr. Patrick Manson will give a course of lectures on Tropical Diseases at the London (Royal Free Hospital) School of Medicine for Women. The lectures will be given on Tuesdays at 4.30 P.M., beginning on May 7th. The course will be open to all qualified practitioners and medical students, and, as far as possible, the lectures will be illustrated by cases. Further particulars can be obtained from the secretary, 8, Hunter-street, W.C.

THE dinner of the Edinburgh University Club of London will take place at the Holborn Restaurant on Wednesday, May 1st, at 7.15 for 7.30 P.M., under the chairmanship of Lord Lister, President of the club. It is expected that the dinner will be largely attended. Members intending to be present or to bring guests must inform one of the honorary secretaries, Dr. James Taylor, 49, Welbeck-street, W., or Dr. G. A. Sutherland, 73, Wimpole-street, W.

THE Archbishop of Canterbury will take the chair at the annual meeting of the Church Missionary Society Medical Mission Auxiliary to be held in St. James's Hall on Tuesday next, April 30th, at 3 P.M. The other speakers will include Mr. A. E. Clayton, L.R.C.P., L.R.C.S. Edin. (West Africa); Mr. A. T. Kember, L.R.C.P., F.R.C.S. Edin. (China); and Mr. J. O. Summerhayes, M.R.C.S., L.R.C.P. Lond. (India).

UNDER the presidency of Sir T. Andros de la Rue, Bart., chairman of the council, a festival dinner in aid of the Royal Hospital for Diseases of the Chest, City-road, E.C., will be held at the Hôtel Métropole on Monday, May 6th. The object of the festival is to raise £10,000 to purchase a freehold site, to build and to furnish a nurses' home, and to carry on the work of the hospital.

HIS MAJESTY THE KING, who, as Prince of Wales, has been patron of the Royal Orthopædic Hospital since the death of the late Prince Consort, has graciously acceded to the appeal of the governors to continue his patronage.

THE KING has also signified his pleasure in acceding to the request of the council of the Royal Medical

Benevolent College that he should become the patron of the institution.

MR. A. WYNTER BLYTH has been nominated as President-Elect of the Incorporated Society of Medical Officers of Health for the year 1901-1902.

AMONG the recent cases of plague at Cape Town are four European patients. A nurse at the Plague Hospital has died.

THE King has graciously granted his patronage to the Royal Hospital, Richmond, Surrey

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THE ROYAL COMMISSION ON SOUTH AFRICAN HOSPITALS.

(Continued from p. 1098.)

IX.

OUR SUGGESTIONS FOR THE RE-ORGANISATION OF THE ARMY MEDICAL SERVICE.

HAVING dealt with the report and suggestions of the Royal Commission we now arrive at the most difficult point—the attempt on our own part to suggest measures of reconstruction and reform. Although it is undeniably true that time is eventually the devourer of all things there is a sense in which it is premature perhaps so to regard it; for whatever may be the remote effect of its operations, time from day to day and year to year manifests itself as a reconstructor and revitaliser of some things which are destined to survive the touch of its effacing fingers for a long period. By a process of selection some things perish, leaving others in the greater prominence. And this, we fancy, will prove to be the case with the army medical service.

One of the most fatal mistakes which can be made is implied in the general belief that all deficiencies can be supplied in time of war by having recourse to civil aid. During the present war a large number of civil surgeons have no doubt been employed with great benefit to all concerned and hospitals have been fitted out by private bounty—some of them with an elaboration of comfort which left little or nothing to be desired and on a scale with which no Government could hope to vie. Nothing can be further from our intention than to say a word in depreciation of the efforts that have been made in this direction and in other directions. There is, and always will be, plenty of room for doing very needful, indeed essentially necessary, work of this kind on the part of the nation and of the various Red Cross societies. Still something more than this is obviously necessary. Whilst war is war no responsible Government can be entirely dependent upon, or rest content with, the provisions of private effort. There must in any case be a thoroughly organised, well-trained, and well-manned army medical service. The Commissioners recommend in their report that immediate steps should be taken at the end of this war to increase the permanent strength of the Royal Army Medical Corps and to provide for its speedy enlargement in times of great wars. They also recommend that inducements should be offered to insure the continuous supply of sufficient men of good professional attainments and that means should be adopted for keeping them *au courant* with the results of medical progress so as to secure a high standard of professional efficiency. As regards the speedy enlargement of the medical corps in time of war our present system of medical reserve is quite inadequate for the purpose. Medical officers on the retired list, but liable to serve again, are not generally fit to do more than to take the place at home of those ordered abroad. Medical service in the army with its frequent and long foreign tours is an exhausting service and men age prematurely and suffer in health in many ways which unfit them for any further hard and exhausting work, so that other sources must be looked to. Seeing that for financial reasons it would be impossible to maintain a permanent medical establishment of sufficient strength to meet the requirements of any big war prosecuted on a modern scale, it seems essential that the establishment that we have should be of the best in training, experience, and efficiency and should be capable of being expanded whenever the occasion arrives. The numbers of the Royal Army Medical Corps must be increased, then, but that does not seem to us to be by any means all that is required. It is not the mere growth of the corps so much as its development that is needed. Our present army medical system is based on sound principles, but it is still in a state of immaturity. What should now be considered is the advisability of some comprehensive scheme, to include not only the regular medical service as an integral part of the army, but the medical services of the militia, volunteers, and colonial forces, supplemented by as much medical aid as is needful in time of war from the staffs of our civil hospitals and from the medical profession generally. Our statesmen proudly boast that the war in South Africa has converted the British Empire from a geographical expression into an accomplished fact. And if our colonies should be willing hereafter to take their share in supporting the Imperial burden they will naturally and rightly expect to have a voice in questions of Imperial policy. There are a good many people who think that in the future there will be required not so much a defensive home army as an Imperial army, and what seems to be wanted under the new and altered conditions of the British Empire is a scheme of organisation which will result in the practical formation of an Imperial Medical Service.

There is every reason to believe that the desire of the War Minister and the trend of public opinion are favourable to the making of such improvements and to the carrying out of such reforms as are necessary to place the medical service of the army in a position which will command the respect and approval both of the medical profession and of the public and will enable it to be prepared for the eventualities of war. Mr. Brodrick's public utterances have, however, been somewhat enigmatical as to his intentions. He declared on one occasion that he was prepared to adopt even drastic measures of reform if necessary, and on a subsequent occasion he intimated that he hoped to be able shortly to bring forward a new and satisfactory scheme for dealing with the army medical service. There is no disguising the fact (which was, indeed, admitted by a late Secretary of State for War) that the army has of late years ceased to have any attractions for the most talented alumni of our medical schools and colleges. We are not at all sorry for any delay that may take place in the introduction of a new scheme, because the matter is one that requires to be considered deliberately. Meanwhile there are some questions which urgently press for attention, such as the readjustment of the rates of pay of medical officers serving in India, the very large and disproportionate amount of foreign as compared with home service, and the way in which medical officers when serving at home are harassed by frequent moves and changes of station to the inconvenience and possible detriment of their patients and their own personal discomfort. We know, of course, that much of this is entirely attributable to the undermanning of the medical service and the exceptional demands caused by the war. Let the circumstances and explanation be what they may the present state of tension cannot be prolonged indefinitely. The campaign in South Africa has not only been a fight with physical geography throughout its whole course but a contest against new weapons and hitherto untried tactics. As regards the medical service, it has been conducted under circumstances of the most exceptionally difficult character and such as were altogether beyond the control of that service. The service must not be placed in such a position again.

Life is short and art is long and, indeed, very complex and diversified in the present day. In order to attain success, whether in our universities, in science, in literature or in art, there is no place for men like Bacon, who took all knowledge for his province; on the contrary, the tendency nowadays is for young men to begin to specialise early in their careers, each to take up his own special fragment of knowledge and to cultivate it to the utmost. This tendency, to the regret of many thoughtful and wise people, is a growing one in the medical profession as in other branches of scientific pursuit. Nor is this to be wondered at, for where so much depends upon knowledge of methods and detail, upon laborious painstaking, upon skill, and upon facility of manipulation, it is

beyond the scope of anyone to cope equally well and at the same time with the art of modern surgery in all its branches and with medicine, hygiene, medical statistics, and hospital management. The officers of a public medical service such as that of the army have perforce to do this in a measure, but it is most unreasonable to expect that they can be experts in all subjects alike. What is, however, practically capable of being accomplished is that they should all have an opportunity of refreshing their professional knowledge and that anyone endowed with ability and aptitude in any direction likely to prove advantageous to the State should have all reasonable facilities for exercising these qualities. If such facilities were granted even to a limited member of men, the privilege being guarded against abuse in any way deemed requisite, we should have medical officers proceeding to the highest qualifications in medicine and surgery and these would constitute the pick of the service. The Director-General should, moreover, in the course of time have such a knowledge and record of the capacities, qualifications, and characters of his officers as to enable him at any moment—as on the outbreak of war, for example—to put his finger upon the right men to fill the right places. One of the main objects of the introduction of a general or consolidated medical system instead of the regimental one was to acquire such knowledge by putting medical officers in the exercise of their hospital and professional duties in competition with one another and in the presence of those who were qualified to form an opinion of their work instead of those who were not. But, like many other projects, it failed or proved futile. There are no means, or very few, of rewarding medical officers for professional distinction or scientific work in the service; and, speaking generally, promotion by selection has been apparently attended with so many difficulties that it has never been strictly adhered to. There should, in our opinion, be far more rewards held out for professional merit.

The German Empire is essentially a military Power. That being so, looking to the geographical position of Germany and the greater centralisation of political power in that country, we might expect that there would be a military organisation and pattern impressed upon, and running through the web and woof of, its governing and social fabric, and our expectations would be justified. In this country, where we have no compulsory military service and arrangements have to be made for periodical tours of foreign service on the part of our army, and where so much political power, freedom, and independence exist among the masses, things are different. National systems have grown out of national needs, but such systems have to be suitable to the character of the people and have, moreover, to be moulded and to be adapted to the existing environing conditions. It may be said that the German Government, owing to its one-portal system of government qualification to practice, has a lien and a claim on every medical man's services, and each of them has in time of peace the military rank and the post assigned to him which he would occupy in time of war. The best known university professors are accorded a military rank corresponding to the social and scientific positions which they occupy, and they act as consultants to the medical officers of the army in the field or at base hospitals in time of war and as their clinical instructors in time of peace. There is, moreover, an elaborate system by which medical officers and others are not only attached to hospitals for duty and systematically put through special courses of instruction, but many of the senior medical officers are selected and entrusted with responsible hospital work of all kinds where their duties are not confined to military patients only but embrace civil patients. The forthcoming imperial autumn manœuvres to be held this year in the province of Prussia will show how keenly alive the German Government is to keep pace with military progress, and to bring any new methods and new inventions of warfare to the test of experimental trial. At the moment of writing these articles we learn that the medical department of the German army is to be reorganised; that candidates will be subjected to special examination in military surgery; that medical officers will make tours in future, under the guidance of the surgeon-general, similar to those made by the officers on the general staff; and that sanatoria are to be established for each army corps. In any case, without slavishly copying or following out all the details of the German system it should be possible to take the object and principles underlying that system as a framework for constructing a scheme of our own. Even without assigning beforehand military ranks and titles to all to whom it was proposed to apply in the civil walks of the profession for their aid and coöperation in time of war, there are a good many things that could be done which, it seems to us, it is highly desirable to set about doing. The more important European military Powers have in some respects outstripped this country in the race for medical efficiency in the field and in the importance which they attach to giving to their medical officers increased facilities for study and to having their hospital arrangements and equipment ready with both officers and men properly trained in their use. Not only should field hospitals be complete in every respect, but the whole service should be organised as a body of independent units capable of acting separately or combined. It goes without saying that medical officers should be encouraged in every way to avail themselves of every opportunity, both here and on the continent, of becoming practically acquainted with systems of army medical administration and with all the latest appliances and the results of modern researches. Merely theoretical and book knowledge will do little or no good and will be of little or no service to the State or to the individual. Actual experience and skill in the application of new methods and practices, these have a significance of their own compared with which other acquisitions of theoretical knowledge are of relatively insignificant value.

In outlining a scheme for the remodelling of the army medical service we recognise all the difficulties of the task and we are not vain enough to believe that anything that we can put forward will be so complete, self-balanced, and practicable as to commend itself to all, and still less that there will be any finality about it. Let it be taken for what it is worth, and as put forward thoughtfully and in all good faith. The biggest and boldest policy is sometimes the best and the cheapest policy in the end, and in any case it may supply a standard which can be worked up to in the future.

THE STATUS OF THE DIRECTOR-GENERAL.

1. We propose that the Director-General as directing head of the whole medical service should occupy such a position, receive such a salary, and preside over, and be aided in his work by, such a headquarters' bureau as may be deemed worthy of the post which he holds and its responsibilities; and further, that the Director-General should have direct access to the War Minister when he deems it necessary in the public interest. The functions and responsibilities of the Director-General are of an altogether exceptional as well as of an arduous character and are such as seem to us to require that he should have the right of access to the Secretary of State in order to submit personally his views and recommendations on grave or emergent matters, such as questions affecting the preparations for war and the sanitation and health of the army, instead of having them filtered through one of the heads of the departments of the War Office.

THE ARMY MEDICAL SCHOOL IN LONDON.

2. The Army Medical School should be in London instead of at Netley, and we think that for choice it should be called the "Imperial Medical Service Institute" or "Imperial Medical Service School." We believe that we fully appreciate all that can be said for and against this proposal, and we have come to the conclusion that the arguments in favour of removing the school from Netley to the metropolis greatly preponderate. It is no doubt a serious difficulty that there should be a Royal Victoria Hospital and an attached school already established at Netley and we can quite understand that this fact might in itself be deemed prohibitive of any change. But we do not think that it need be so. Netley as a medical school is inconveniently distant from London. The hospital, notwithstanding its fine and imposing appearance, is, as we think will be generally admitted, not up to the present sanitary standard. But the hospital might remain where it is; it could still be utilised as at present for our transported invalids, and the medical candidates could be temporarily stationed there if necessary during the height of the invaliding season from India and other foreign climates. All coming to this country—including, of course, all medical officers—find themselves in London, and it seems therefore only right and fitting that a medical school of such importance should not be located in the country but in the capital. When the Royal Victoria Hospital was originally built, in the lifetime of the Prince Consort and of her late Majesty Queen Victoria, the site was probably chosen owing to its proximity to Osborne and to the facility which it

offered to the Queen for showing the great interest which Her Majesty always felt in her sick and wounded soldiers. But the monarch will not necessarily be found at Osborne, while London is permanently the capital of the Empire, the place where all congregate. With the number of hospitals in the metropolis, and the extent and variety of injuries and diseases of all kinds to be seen there, London affords an amount of medical and surgical experience and practical information which are procurable probably nowhere else. Access is quickly obtained to most parts of London and almost every conceivable form of instruction is to be had as well as information regarding other places, such as universities and schools abroad. It is not simply going through a course at a special military school or hospital that the medical officer requires on returning from foreign service. He desires to have opportunities of attending post-graduate courses, of studying, and of observing the practice at various hospitals and schools both at home and abroad. If an Imperial Medical Service School were established in London the more cosmopolitan it were in character and the wider its portals were thrown open the better would it be. Not only should its course of instruction be open to all medical officers of the army and of the navy but also to all medical officers of the Indian Medical Service, militia, volunteers, and colonial corps who happened to be in this country and who cared to avail themselves of it. It would be regarded as a distinction and privilege to be a professor in such an institution, and the very publicity of all the proceedings connected with it would very materially tend to attract men of eminence and to keep its appointments free from jobbery and abuse.

GREATER FACILITIES FOR INSTRUCTION OF MEDICAL OFFICERS.

3. Medical officers should be encouraged in all professional studies and in making themselves acquainted with the methods of army medical administration, hygiene, and equipment of other countries. Leave should be granted to them for this purpose and for taking out special courses of instruction both in this country and on the continent, certificates being exacted to insure that the time was actually spent in pursuit of the intended object.

ABOLITION OF ENTRANCE EXAMINATION.

4. We recommend the abolition of the present entrance competitive examination of candidates for the Army Medical School but the retention of the examination on all the subjects which they have been taught there before leaving the establishment and being commissioned as officers of the Royal Army Medical Corps. In the first place, the entrance examination has ceased to be competitive. Moreover, the competitors have all recently become qualified and have therefore had to undergo repeated examinations during their course of study, and they should have already shown their quality by the hospital posts which they have held and by the degrees and diplomas which they have taken. Any further re-examination for the army is naturally distasteful to the large majority of them, and it seems to be superfluous and unnecessary to subject a man to professional tests similar to, or identical with, those to which he has already just been subjected in order to obtain his qualifications to practise. It is not at that time but at a subsequent stage of his career as a medical officer that the desirability or necessity of an examination test comes in; therefore let there be substituted a competitive examination for medical officers in the place of that now in force for candidates on entrance. It cannot be necessary to place or to grade the candidates in some order of priority from the beginning.

PROPOSED EXAMINATIONS.

5. The examination of the medical officer in substitution of the entrance competitive examination of the medical candidate might be taken somewhere within the first ten years of the officer's service, the time to be chosen by the medical officer and regulated by the convenience of the service. Such examination should be of two kinds, one a compulsory and pass examination, the other a voluntary and special or honours examination. (*a*) In the pass examination a certain standard of proficiency should be exacted in order to show that the officer has kept himself reasonably acquainted with the progress of surgery, medicine, army hygiene, and army medical organisation and administration (all to be as practical and pertinent to army service and hospital requirements in peace and war as possible). (*b*) The honours examination should be voluntary in any subject or subjects that the candidates may select, such as military surgery, medicine, epidemiology, hygiene (including bacteriology), &c. A separate list should be kept of the honours men and their names should be marked with an asterisk or some distinguishing letters as is now done with officers who have passed the staff college (*p.s.c.*).

INSTRUCTIVE MILITARY MANŒUVRES.

6. In all military manœuvres in which a composite force of regulars, militia, volunteers, and colonial corps take part the mimic warfare should be as like real war as practicable. The hospital and medical part should be on one uniform and organised plan with some sort of unification of all the medical services and their officers, so that they may rehearse in times of peace what would be actually required of them in war, every man knowing his place and being in it. Everything should be carried out as on active service in the field, but on a reduced and miniature scale, of course, and field, stationary, and general hospitals should be represented. Experimental trials should be made of a system by which general hospitals could be split up and divided into smaller units to meet the exigencies of war, as in the case of long and impracticable lines of communication, change of base, or the temporary provision of more than one base. The surprises and other unexpected occurrences of war might be counterfeited so as to test the promptitude and judgment of medical officers under all sorts of conditions; and one or more of them might be selected in turn to design, to organise, and to arrange for the medical requirements of a force at such manœuvres, forwarding their proposed schemes to the principal medical officer under whom they are serving.

DELEGATION OF CERTAIN EXISTING DUTIES OF THE ROYAL ARMY MEDICAL CORPS.

7. To the question asked by the Royal Commissioners in their report, "Whether it is advisable and practicable to some, and if so to what, extent, that the Royal Army Medical Corps should have exclusive possession of and control over all necessaries for the sick and wounded (other than ordinary food and clothing, not being hospital clothing), so as to avoid the necessity of requisitioning upon the Army Service Corps or the Ordnance authorities," our reply would be that it is both advisable and practicable, but not in the way indicated by the Commissioners. It seems to us that medical officers in time of war are, as a rule, overwhelmed with work and responsibility and that they are expected to carry out—that is, to execute—duties which should be discharged by others who should act under the direction of, and subordinate to, the medical service. In order to guard against any misapprehension we may say that medical officers must, under the general officer in supreme command, have independent control over everything coming within their legitimate functions and sphere of duty, but that is no reason why they should have to discharge all the duties appertaining thereto. *Qui facit per alium facit per se.* There are a number of outside duties of a purely military or *quasi*-military character, such as drill, charge of animal transport, the drawing of rations, the purchase of food and stores, &c., of which they might usefully be relieved by, let us say, the Army Service Corps, if men of that corps were specially told off to carry out their orders. The *Intendance* of the old French army system became intolerable because it exercised its power in hospitals over the heads of the medical officers instead of under them. The medical officers of the French army have for many years now been completely emancipated from the control of the *Intendance*, and the French medical service has, perhaps, a more perfect autonomy than is the case in any other European army. But we are not without a precedent in modern military history for the kind of arrangement which we have in view. There is nothing of such importance in connexion with field medical administration as transport; it is, as it were, as the linch-pin of a cart or the pivot on which the success of the hospital system in war turns. The Americans notably found this to be the case in their great war, and in 1864 a most important Act was brought before Congress by the War Department and passed into law. The ambulance transport was completely separated from the other transport services of the army and was placed under the direction of the head of the medical department who had not only the direction of the

vehicles for the carriage of the sick and wounded but also that of the officers and men employed, subject only to the general authority of the officer commanding the forces in chief. The medical director or chief medical officer of an army corps had simply to issue his orders to those in charge of the ambulance, and the quartermaster-general's department was relieved of all authority and responsibility in the matter. We should like to see a practical trial given to a system by which the Royal Army Medical Corps, while still possessing all necessary power and responsibility, could be relieved of duties of a more purely military kind, such as the charge of transport animals and the purchase of stores. It should be sufficient for them to issue the orders, they should be spared the responsibility of execution. There is a possible danger connected with this power to purchase on the part of the medical service which should not be altogether lost sight of—namely, that the supply departments might relax their efforts to meet a medical officer's requirements in consequence of the knowledge that the latter could purchase in the local markets, and an unfair strain and responsibility might thus be entailed on the medical service.

CORPS UNIT MEDICAL OFFICERS.

8. Every corps unit should have a medical officer *attached* to it who should remain with it for a definite time (say five years) in order to familiarise him with the habits, customs, and regulations of military life, to avoid the inconvenience and discomfort to patients of frequent changes of medical officers doing duty with the officers, men, women, and children of a corps, and to furnish some one reliable medical man to whom the officer commanding and all in the corps could apply. The medical officer doing this duty might, wherever practicable, take his part in professional work at the station hospital and in the occasional garrison duty common to all. A regiment has a medical officer with it in war and it is for the mutual benefit of both that it should have one in peace also. In the armies of France, Germany, Austria, Italy, and Russia the system in force, as a general rule, combines the advantages both of the general and regimental systems. Every battalion has its medical officer. In Germany and Austria the regimental medical officer does departmental duty in the general hospital, while in France, Italy, and Russia he attends the sick in the regimental hospitals or infirmaries which are established for the treatment of minor cases.

BARRACK DISPENSARIES.

9. We think that a barrack dispensary system could be advantageously introduced into the British army and that small station or depôt hospitals might, to some extent, be done away with, as they are frequently a waste of money and energy. Arrangements might be made for utilising civil hospitals, wherever practicable, for the purpose. A notable feature in the French army is the utilisation of civil hospitals for military medical service. The soldier patients might be under the care of medical officers, as was the case, we believe, not long ago in Edinburgh. The men of the Royal Army Medical Corps should be trained on both sides so as to have the advantage of a medical (ward) standard as well as a military (disciplinary) standard. For infectious diseases in the army existing civil hospitals for infectious diseases should as far as possible be utilised on the score of economy.

DUTIES OF MEN OF THE ROYAL ARMY MEDICAL CORPS.

10. The men of the Royal Army Medical Corps should be thoroughly trained in their duties as hospital orderlies and cooks. War is exceptional, and when it occurs the inefficiency from sickness is invariably much in excess of that from wounds. It follows that men who have to act as hospital orderlies should be trained in those duties which they are most commonly required to fulfil, in peace and war alike. Their hospital (ward) dress should be of a suitable character. Military drills should be reduced as far as possible. The duties of the hospital orderlies are of too miscellaneous a character. They learn their company and stretcher drill and from their military associations and surroundings are, perhaps, too apt to exalt the importance of military in comparison with medical matters. It is not easy to serve two masters, the tendency being to hold to the one and to despise the other, the other in this case being the medical side of their duties. The men of the corps are, nevertheless, as a rule, excellent and zealous in their work. It will be seen that we concur with the Commissioners in their suggestion that the officers of the corps should, so far as is consistent with a due maintenance of discipline, relax the strict military rule generally adopted in hospitals so as to give an additional feeling of ease to the patients and to enable them better to appreciate the comforts of a hospital. We think, moreover, that the medical officer in charge should make a practice of periodically going round with his medical staff and of identifying himself with their professional work as much as possible by inquiring into the nature, causes, and treatment of the cases. If he has any remarks to make or suggestions to offer it is needless to add that he should pay due regard to professional ethics.

FEMALE NURSES.

11. Without skilled female nurses nursing cannot be properly carried out and it will probably be necessary under ordinary and existing circumstances to increase the existing establishment. It will certainly be so in case of war on any large scale.

SUPPLEMENTARY HOSPITAL PERSONNEL.

12. With a view to being ready to supplement the regular army medical service to any required extent in case of war we consider that the following registers or lists should be prepared and kept in the medical branch of the War Office: (1) a nominal list of those members of the junior staffs (medical and surgical) of all the more important hospitals in the United Kingdom and of the colonies who would be willing in case of need to proceed to the seat of war and to give their professional services (an annual retaining fee would be money well laid out for this purpose); (2) a similar list of trained female nurses and of nursing institutions, as well as of Red Cross societies and other philanthropic bodies with the estimated amount of available aid which they could respectively furnish in time of war. The civil element should be very freely utilised in war at general and stationary hospitals and, of course, in private hospitals sent out as supplementary aid to the medical provision afforded by Government. In cases of great pressure or emergency the civil element might largely take over the hospital duties at the base and at the rear, and so free the military medical element for the work in front where it would be most urgently needed.

FIELD HOSPITAL UNITS.

13. There should be some field hospitals organised and working as complete and independent hospital units, on the lines of a field battery of Royal Artillery at our camps and garrisons, ready to take the field with their existing establishments. Were it so and were these field hospitals practised on every available occasion, it should be easy, on the mobilisation of troops for active service, to attach transport from the general transport of the army, together with a certain proportion of a bearer company, and to allow the whole to embark as a field hospital unit ready to take the field at once. In this way officers and men who had worked together in times of peace would maintain the same relations in war, harmony would be secured, and the competition between one field hospital and another would excite wholesome emulation.

POINTS CONCERNING ABOVE.

14. The following points should be considered with a view to their final settlement:—The attachment of bearer companies to field hospitals for employment in connexion with them when no fighting was taking place and their services were not elsewhere required; the size and equipment of field hospitals (which must obviously always be kept as light and mobile as possible and have only a limited supply of stretchers instead of bedsteads); the size and equipment of stationary and general hospitals and the divisibility of the latter into smaller sections—say of 100 beds (of a lighter and narrower kind of bedstead than those now in use); the nature and amount of hospital transport; and arrangements for the possible supply of a large force of Indian dhoolie-bearers in case of need.

SANITARY CORPS.

15. Assuming, as we assuredly may, that special sanitary officers will be appointed and will form part of any future military expedition, the question will also have to be discussed whether any sanitary body or corps for executive sanitary work should be organised, and, if so, whether it should be affiliated to the Quartermaster-General's department or that of the medical service or should have a special and separate existence under the orders of the chief sanitary officer. It would be scarcely practicable to employ unarmed

civil labourers on first effecting a landing on an enemy's soil. What might possibly meet the occasion would be a large and well-organised body for executive conservancy work in connexion with the Quartermaster-General's department.

RESERVE OF STORES.

16. The reserve medical stores kept on hand must obviously be calculated on the number of army corps or force maintained on the home establishment as efficient, ready, and designed for the express purpose of offensive warfare. It is equally obvious that the most portable and compressed forms of medicine and drugs must largely enter into the list of preparations intended for field service, that the number and variety of these must be restricted to those of well-known and established reputation, and that medical officers and others must learn that bodies of troops operating in the field cannot be accompanied on service by a section of wholesale dispensing chemists and their drugs, and that what may be termed a "great run" on any particular drug when others would suffice equally well has to be carefully avoided. It is a question whether a certain amount of shipping transport could not be placed entirely at the disposal of the Director-General, so that medical stores, accompanied by a supercargo provided with lists of everything on board, could be sent out in the transports and hospital ships for field service use.

LIGHTENING OF CLERICAL WORK IN THE FIELD.

17. The conduct of the business transactions connected with field service seems to us to be susceptible of improvement in the way of more directness of aim and simplification, and this might be effected by taking a leaf out of the method adopted in civil life, as at the various Coöperative Stores, for example. With the view of instructing medical officers, the officers of the supply departments, and all concerned with the field medical arrangements, as well as with the object of decreasing the amount of clerical labour and of facilitating the conduct of business as far as practicable, a portable handbook or *précis* of these arrangements should be published by authority and used as a general guide. This should be issued on the order for mobilisation and be considered as binding on all concerned during a campaign. It should not only succinctly set forth the different scales of hospital equipment provided, but the different sources of supply to which requisitions and applications have to be addressed, together with condensed notes of a practical character. This was, we believe, done with practical advantage on the occasion of some of the Afghan campaigns. A *précis* of field medical arrangements was published under the sanction, and with the authority, of the military department of the Government of India. Every medical officer should be supplied with a copy of such a portable handbook as we are referring to, with a carbon book for making short communications and requisitions on departments, a small almanac-diary, and a medical certificate form-book, these should be all that are personally necessary for his use. Other documents and forms of returns could be kept at the field, stationary, and general hospitals. With the agency of the carbon book a duplicate of any communication or requisition addressed to individuals would be preserved, and these, with the entries in the diary, would remain as a permanent record, so far as they went, of the medical transactions in the field and could be handed in as so many vouchers at the end of a campaign. All that related to more elaborately prepared documents and returns connected with the official medical transactions and history of the war should be relegated to the hospitals furnished with a more or less permanent staff of medical officers and provided with the requisite clerical aid.

TREATMENT OF CONVALESCENTS.

18. Among the subjects which might be usefully taken up for consideration at the present time, when a large number of invalids have already returned, or are returning, from the war, is the question of the greater utilisation of military hospitals and barracks situated in favourable districts for convalescing soldiers requiring change of air and for such as need special hospital accommodation and treatment—the open-air treatment of pulmonary tuberculosis, for example. The sites occupied by some of the Government hospitals and buildings are so salubrious and good that it seems to be a pity to restrict the advantages to the sick, suffering for the most part from trifling ailments, drawn from the troops quartered in the neighbourhood. We have not yet heard of any movement in the army in the direction of the open-air treatment so successfully adopted in certain forms of pulmonary disease.

HOME MILITARY HOSPITALS.

19. The opportunity should be taken in the interest of the sick soldier to inquire into the subject of the management of home military hospitals, concerning which an article by Mr. W. Pugin Thornton of Canterbury was recently published in these columns.[1] As Mr. Thornton's paper professes to be largely based upon a statement of facts and sets forth the results of a personal experience acquired in a military hospital it seems to us to be well deserving of attention at the present time.

MEDICAL PRACTITIONERS AND UNQUALIFIED (PHARMACEUTICAL) ASSISTANTS.

A JOINT meeting of the Glasgow Southern Medical Society, the Glasgow and West of Scotland Branch of the British Medical Association, and the Glasgow Eastern Medical Society was held in Glasgow on April 17th, Dr. WILLIAM WATSON, President of the Glasgow Southern Medical Society, being in the chair.

It was unanimously resolved that the following memorial should be forwarded to the General Medical Council:—

That the memorialists are medical practitioners in Glasgow and the West of Scotland and have a right at common law, in virtue of their degrees granted by the Scottish universities and of their diplomas granted by the three qualifying corporations of Scotland, to sell drugs and poisons, including the scheduled poisons under the Pharmacy Acts. That the liberty of selling drugs and poisons (except scheduled poisons) belongs to every British subject and the memorialists are under no disability in this respect merely because they are members of the medical profession. That the rights and privileges of the memorialists as medical practitioners to sell drugs and poisons, including the scheduled poisons, are expressly reserved by Parliament (32 & 33 Vict., cap. 117, section 1). That the memorialists have learned with surprise and alarm of a conviction of a registered medical practitioner on a charge in the following terms: "That he, being a registered medical practitioner, habitually employed as assistants for the sale of drugs and poisons persons who are not qualified to act as chemists or pharmaceutical assistants, and thereby causes such persons to commit breaches of the Pharmacy Acts." The conviction is said to have been that the registered medical practitioner in question was guilty of "infamous conduct in a professional respect." The memorialists are bound to assume that conduct of a grave and reprehensible character was proved to the satisfaction of the General Medical Council before such a conviction could take place, but of the facts proved and the arguments used they have no knowledge. That a general impression has gone abroad that the only evidence against the registered medical practitioner in question was evidence in support of the charge as quoted, and that on this charge he was convicted of infamous conduct in a professional respect. That this view of the matter is publicly stated and commented on in trade journals, such as the *Pharmaceutical Journal* of Dec. 8th, 1900, and the *Chemist and Druggist* of the same date, and no secret is made of the meaning of such a judgment—viz., altogether to deprive medical practitioners of the right to sell drugs and poisons. In the view of the memorialists this is an illegal and unwarrantable interference with the memorialists' rights, and they do not believe that the General Medical Council intended to lay down any such general doctrine or to impose any such disability. That a difference of opinion formerly existed as to the true interpretation of section 15 of the Pharmacy Act, 1868, some holding that the person who commits the offence under that section is the person who keeps open shop, to whom the poisons belong, and on whose behalf the sale is effected; others holding that the only offender under that section is the actual salesman. The latter view has received judicial sanction both in England and in Scotland, with the result that the salesman and not the owner of the shop is the person liable. That if the judgment of the General Medical Council in the case of the registered medical practitioner above referred to is to be regarded as a general statement of their views as to the responsibility of medical practitioners, it amounts to a reversal of the decisions of the law courts when interpreting section 15 of the Pharmacy Act, 1868. It makes the owner of the shop liable for offences under that Act, whereas the law has decided that the salesman and not the owner is the person liable. That under section 15 of the Pharmacy Act, 1868, a certain statutory penalty is imposed upon persons infringing—viz., a fine of £5; but the decision of the General Medical Council not only imposes a penalty upon persons not struck at by that section of the Act, but also imposes an entirely new penalty—viz., deprivation. Where Parliament has prescribed the penalty to be attached to any Act it is incompetent for the General Medical Council, or any other body except Parliament, to alter or increase the penalty. To subject registered medical practitioners to the risk of being struck off the Register because a salesman of theirs sells drugs or poisons is unauthorised by any Act of Parliament and is an unconstitutional assumption of statutory authority on the part of the General Medical Council. That the memorialists are not concerned to defend any medical practitioner who authorises his assistants to sell scheduled poisons. They recognise that, as the law stands, the utmost care should be taken to prevent such sales by anyone not duly authorised. But even in such an

[1] THE LANCET, March 30th, 1901, p. 968.

event they cannot but view with alarm the attempt now being made to hold one person liable for a statutory offence committed by another and to visit such liability with so severe a penalty as is contemplated—viz., deprivation. If it be right, in the interest of the public, that this new and grave responsibility should be imposed on medical practitioners, this can only be done by Parliament and after full consideration of the interests involved. That in all the matters which have been already referred to the medical practitioners are in precisely the same position as Members of the Pharmaceutical Society. They are entitled to employ unqualified assistants but such assistants must not sell scheduled poisons. It is impossible to teach the business of dispensing without employing unqualified assistants, and subject to the common law responsibility of the shopkeeper for any blunders which the assistant may make and the statutory responsibility of the salesman himself, there is no restriction upon the employment of such assistants, whether apprentices or not. The memorialists cannot conceive that what is permissible on the part of a pharmaceutical chemist can be "infamous conduct in a professional respect" on the part of a medical practitioner. That in some quarters the decision of the General Medical Council has been interpreted to mean that where an unqualified assistant has been convicted under the Pharmaceutical Acts of selling a scheduled poison he should, in addition to the penalty imposed by Section 15 of the Act of 1868, be subjected to the further penalty of instant dismissal at the hands of his employer; and that a failure on the part of an employer so to dismiss an offending assistant amounts to "infamous conduct in a professional respect." This view of the decision is open to the same objection as has been already urged—viz., that it adds a new and arbitrary penalty to the penalty imposed by Act of Parliament. But it is open to the further objection that failure on the part of the employer to do what no law requires, and what in many cases may be a very harsh act, is to be treated as infamous conduct. Speaking generally, no omission of that kind can be properly so characterised. Infamous conduct must consist of some overt act, not any omission. But, apart from this, it can never be infamous to omit to do what no law requires to be done.

The memorialists, therefore, respectfully submit that this matter should be reconsidered and that, whatever be the special circumstances justifying the decision in the case of the registered medical practitioner above referred to, no general doctrine should be laid down to the effect that the employment by a registered medical practitioner of an unqualified person to sell drugs and poisons is "infamous conduct in a professional respect."

It was also agreed that the following gentlemen should be appointed a deputation to support the memorial before the General Medical Council—viz., Dr. John Lindsay Steven, Dr. Russell, Dr. C. E. Robertson, Dr. David Young, Dr. William Watson, Dr. John Stewart, Dr. J. H. Nicoll, and Dr. John F. Orr.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In 33 of the largest English towns 7385 births and 4159 deaths were registered during the week ending April 20th. The annual rate of mortality in these towns, which had been 19·2 per 1000 in each of the two preceding weeks, declined to 18·4 per 1000 last week. In London the death-rate was 17·5 per 1000, while it averaged 19·0 per 1000 in the 32 large provincial towns. The lowest death-rates in these towns were 10·8 in Burnley, 11·2 in Halifax, 11·9 in West Ham, and 12·3 in Cardiff; the highest rates were 22·7 in Manchester, 22·9 in Liverpool, 23·7 in Nottingham, and 25·4 in Wolverhampton. The 4159 deaths in these towns included 346 which were referred to the principal zymotic diseases, against 380 and 397 in the two preceding weeks; of these, 117 resulted from measles, 108 from whooping-cough, 39 from diphtheria, 33 from diarrhœal diseases, 27 from "fever" (principally enteric), 20 from scarlet fever, and two from small-pox. No death from any of these diseases was registered last week in Croydon, Plymouth, Huddersfield, or Halifax; in the other towns they caused the lowest death-rates in Norwich, Birkenhead, Oldham, and Newcastle, and the highest rates in Hull, Sunderland, and Gateshead. The greatest proportional mortality from measles occurred in Portsmouth, Liverpool, Bolton, Blackburn, Leeds, and Sunderland; from scarlet fever in Blackburn; and from whooping-cough in Bristol, Hull, and Sunderland. The mortality from "fever" and from diarrhœal diseases showed no marked excess in any of the large towns. The 39 deaths from diphtheria included 11 in London, four in Bristol, four in Manchester, three in Leeds, and three in Sheffield. Two fatal cases of small-pox were recorded in Hull, but not one in any other of the 33 large towns; and no small-pox patients remained under treatment in any of the Metropolitan Asylums hospitals on Saturday, April 20th. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 1526, against 1568, 1572, and 1601 on the three preceding Saturdays; 150 new cases were admitted during the week, against 167, 180, and 205 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 360 and 345 in the two preceding weeks, rose again last week to 374, but were slightly below the corrected average. The causes of 39, or 0·9 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Bristol, Bradford, Leeds, and 16 other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Hull, and Gateshead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·1 and 23·2 per 1000 in the two preceding weeks, further declined to 23·0 per 1000 during the week ending April 20th, but showed an excess of 4·6 per 1000 over the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 18·5 in Perth and 20·5 in Aberdeen to 26·7 in Greenock and 28·3 in Dundee. The 722 deaths in these towns included 56 from whooping-cough, 23 from diarrhœa, 21 from measles, 10 from small-pox, four from "fever," two from scarlet fever, and one from diphtheria. In all, 117 deaths resulted from these principal zymotic diseases last week, against 102 and 95 in the two preceding weeks. These 117 deaths were equal to an annual rate of 3·7 per 1000, which was 2·2 above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough, which had been 57 and 51 in the two preceding weeks, rose again last week to 56, of which 37 occurred in Glasgow, 14 in Edinburgh, two in Dundee, and two in Paisley. The deaths from diarrhœa, which had been eight and 13 in the two preceding weeks, further increased to 23 last week, and included 12 in Glasgow, five in Edinburgh, and four in Dundee. The fatal cases of measles, which had been 16 and 17 in the two preceding weeks, further rose last week to 21, of which eight were registered in Edinburgh, five in Dundee, four in Leith, and two in Glasgow. The deaths from small-pox, which had been 10, five, and six in the three preceding weeks, rose again last week to 10, and were all recorded in Glasgow, where two of the four deaths from "fever" and the two fatal cases of scarlet fever were also registered. The deaths referred to diseases of the respiratory organs in these towns, which had increased from 126 to 155 in the four preceding weeks, declined again to 130 last week, and were slightly below the number in the corresponding period of last year. The causes of 34, or nearly 5 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 31·9 and 35·6 per 1000 in the two preceding weeks, declined again to 35·4 during the week ending April 20th. During the past four weeks the death-rate in the city has averaged 34·2 per 1000, the rates during the same period being 18·0 in London and 23·1 in Edinburgh. The 235 deaths of persons belonging to Dublin registered during the week under notice were within one of the number in the preceding week, and included 18 which were referred to the principal zymotic diseases, against 12 and 15 in the two preceding weeks; of these, nine resulted from whooping-cough, four from diarrhœa, three from "fever," and two from scarlet fever. These 18 deaths were equal to an annual rate of 2·7 per 1000, the zymotic death-rate during the same period being 1·5 in London and 4·7 in Edinburgh. The fatal cases of whooping-cough, which had been five and eight in the two preceding weeks, further increased last week to nine. The deaths from diarrhœa, which had been one and three in the two preceding weeks, further rose to four last week. The fatal cases of "fever," which had been four and two in the two preceding weeks, rose again to three last week. The mortality from scarlet fever corresponded with that in the preceding week. The 235 deaths in Dublin last week included 34 of children under one year of age and 65 of persons aged upwards of 60 years; the deaths both of infants and of elderly persons showed a slight decline from the numbers recorded in the preceding week. Twelve inquest cases and six deaths from violence were registered; and 98, or more than two-fifths, of the deaths occurred in public institutions. The causes of 11, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

SOUTH AFRICAN WAR HONOURS.

THE King has given orders for the following promotions and appointments in recognition of the services of the undermentioned officers during the operations in South Africa. These rewards are for services in South Africa up to Nov. 29th, 1900, the day on which Field-Marshal Lord Roberts handed over the command. Owing to the multitude of recommendations forwarded to the Commander-in-Chief it has not yet been possible fully to examine those for regimental service or those relating to the Militia Yeomanry, Volunteers, and certain other services.

ROYAL NAVY.

To be a Companion of the Distinguished Service Order:—

Staff Surgeon Ernest Courtney Lomas, R.N.

Staff Surgeon Lomas entered the service in 1891 as Surgeon and was promoted last year to Staff Surgeon for services in South Africa.

THE ARMY.

To be Ordinary Members of the Military Division of the Third Class, or Companions of the Most Honourable Order of the Bath:—

Colonel William Flack Stevenson, R.A.M.C., Professor of Surgery at the Army Medical School, Netley; principal medical officer on the line of communication in South Africa.

Colonel (local Surgeon-General) James Francis Supple, R.A.M.C.

Colonel Supple served in the Ashanti war of 1873-74 and was present at the attack and defence of the hospital at Foomanah (medal). He also served in the Afghan war of 1878-80 (medal) and with the Sixth Brigade (mentioned in despatches, medal and clasp).

Lieutenant-Colonel (local Colonel) William Donovan, R.A.M.C., principal medical officer, Cavalry Division.

Colonel Donovan served in the Afghan war in 1879-80 with the Cabul field force and afterwards with the Koorum force and took part with the Zarmusht expedition under Brigadier-General Tytler, in medical charge of the 85th King's Light Infantry, including the assault on Lawa (medal). He also served in the Boer war of 1881 with the Natal field force as a volunteer. He served with the Chitral relief force under Sir Robert Low in 1895 (mentioned in despatches, medal with clasp).

Lieutenant-Colonel (local Colonel) Oswald Gillespie Wood, R.A.M.C.

Colonel Wood served in the Egyptian war of 1882 and was present at the battle of Tel-el-Kebir (medal with clasp and Khedive's star).

Lieutenant-Colonel (local Colonel) Alfred Keogh, R.A.M.C.

Colonel Keogh entered the service in 1880 and reached the rank of Lieutenant-Colonel in 1900.

Colonel W. D. C. Williams, New South Wales Army Medical Corps.

To be an Ordinary Member of the Second Class, or Knight Commander of the Order:—

Sir William MacCormac, Bart., K.C.V.O., consulting surgeon to the forces.

To be Ordinary Members of the Third Class, or Companions of the Order, the following consulting surgeons to the forces:—

Sir Thomas Naghten Fitzgerald, Kt., Sir William Thomson, Kt., Mr. Alfred Downing Fripp, M.V.O., Mr. George Henry Makins, Mr. Frederick Treves, M.V.O., Mr. William Watson Cheyne, Mr. George Lenthal Cheatle, Dr. Kendal Franks, and Dr. John Chiene.

To be Ordinary Members of the Second Class, or Knights Commanders of the Most Distinguished Order of St. Michael and St. George:—

Surgeon-General William Deane Wilson, A.M.S., Principal Medical Officer in South Africa.

Surgeon-General Wilson served in the Afghan war of 1878-80, and in the Soudan expedition under Sir Gerald Graham in 1884 as principal medical officer of the Infantry Brigade, and was present in the engagements at El Teb and Temai (mentioned in despatches, promoted Surgeon-Major, with relative rank of Lieutenant-Colonel, medal with two clasps and Khedive's star).

Colonel Thomas Joseph Gallwey, C.B., R.A.M.C., principal medical officer of the Infantry Division in South Africa.

Colonel Gallwey served in the Afghan war of 1879 and was present at the attack and capture of Ali Musjid (medal with clasp). He served in the Egyptian war of 1882, and was present at the battle of Tel-el-Kebir (medal with clasp and Khedive's star); with the Nile expedition of 1884-85 when he had charge of the Debbeh Field Hospital and took part in the operations of the Desert column on its return to Korti (mentioned in despatches, promoted Surgeon-Major, clasp); and also with the Dongola expeditionary force, under Sir H. Kitchener, in 1896 as principal medical officer to the force, including the engagement at Firket and the operations at Hafir (mentioned in despatches, C.B., British medal and Khedive's medal with two clasps). In 1897-98 he was principal medical officer with the Egyptian army and was present at the battles of the Athara (mentioned in despatches) and Khartoum (mentioned in despatches, promoted to Colonel, two clasps to Khedive's medal). He was nominated to the third class of the Medjidieh for services under the Egyptian Government.

To be Ordinary Members of the Third Class, or Companions of the Order:—

Colonel Edmond Townsend, C.B., R.A.M.C., principal medical officer, 1st Infantry Division in South Africa.

Colonel Townsend was present at Belmont and Enslin. He served in the Abyssinian campaign from December, 1867, to June, 1868, and was present at the action of Arogee (medal). Served throughout the operations in the Malay Peninsula in 1875-76, including the actions of Jan. 4th, 14th, and 20th, and Feb. 4th; severely wounded (medal with clasp). Served in the Zulu war of 1879 and present in the engagement at Ulundi (mentioned in despatches). Served in the operations against Sekukuni in 1879 and was present at the storming of the stronghold (medal with clasp). Served in the Egyptian war of 1882 and was present at the battle of Tel-el-Kebir (medal with clasp and Khedive's star). He also served with the Burmese expedition of 1885-86 (medal with clasp) and with the Ashanti expedition under Sir Francis Scott in 1895-96 (mentioned in despatches, star). In the campaign on the north-west frontier of India under Sir William Lockhart in 1897-98 he served with the Mohmund field force (mentioned in despatches) and was afterwards principal medical officer of the 1st Division of the Tirah expeditionary force (mentioned in despatches, C.B., and medal with two clasps).

Surgeon-Lieutenant-Colonel Henry Frank Hensman, retired May, late 1st Life Guards.

Surgeon-Lieutenant-Colonel Hensman served in the Umbeyla campaign on the north-west frontier of India in 1863 with the Durbund field force.

Lieutenant-Colonel (now local Colonel) Arthur Thomas Sloggett, R.A.M.C.

Lieutenant-Colonel A. T. Sloggett served with the Dongola expeditionary force under Sir H. H. Kitchener in 1896, including the engagement at Firket and the operations at Hafir (mentioned in despatches, promoted to be Surgeon-Lieutenant-Colonel, 4th Class of Osmanieh, and Khedive's medal with two clasps). He served also in the Soudan campaign of 1898 as senior medical officer of the 1st Brigade British Division, and was present at the battle of Khartoum (dangerously wounded, mentioned in despatches, promoted to the higher grade of his rank, 3rd Class of the Medjidieh, clasp).

Lieutenant-Colonel (local Colonel) John Francis Williamson, R.A.M.C.

Lieutenant-Colonel J. F. Williamson served in the Afghan war of 1878-79, and was present in the engagement at Charasiah on Oct. 6th, 1879, and in the operations round Cabul in December, 1879, including the investment of Sherpore; accompanied Sir Frederick Roberts in the march to Candahar, and was present at the battle of Candahar (mentioned in despatches, medal with three clasps, and bronze decoration). Served in the Egyptian war of 1882, and was present at the battle of Tel-el-Kebir (medal with clasp, and Khedive's star). Served with the Burmese expedition in 1887-88 (medal with clasp). He also served in the campaign on the north west frontier of India under Sir William Lockhart in 1897-98 with the Mohmund Field Force (mentioned in despatches), and afterwards with the Tirah expeditionary force in the Peshawar column and the 5th Brigade (medal with two clasps).

Lieutenant-Colonel (local Colonel) Percy Herbert Johnston, R.A.M.C.

Lieutenant-Colonel Johnston served in the Afghan war of 1879-80, and took part with the Zarmusht expedition, including the assault of Lawa (medal).

Major (now Lieutenant-Colonel) Walter George Augustus Bedford, R.A.M.C., secretary to the Principal Medical Officer in South Africa.

Lieutenant-Colonel Bedford entered the service in 1881 and became Surgeon-Major in 1893.

Major George Washington Brazier-Creagh, R.A.M.C.

Major Brazier-Creagh entered the service in 1881 and became Surgeon-Major in 1893.

Major Frederick Samuel Heuston, R.A.M.C.

Major Heuston served with the Hazara expedition in 1888 in medical charge of the 2nd Battalion Northumberland Fusiliers (medal and clasp).

Surgeon-Major (now local Lieutenant-Colonel) Charles R. Kilkelly, Grenadier Guards.

Lieutenant-Colonel Kilkelly entered the service in 1885 and became Surgeon-Major in 1898.

Major William Rice Edwards, I.M.S.

Major Edwards entered the service in 1886 and was made Surgeon-Major in 1898.

Major Henry Alfred Cummins, R.A.M.C.

Major Cummins served with the Sikkim expedition in 1888 (medal with clasp).

Surgeon-Lieutenant-Colonel E. B. Hartley, V.C., C.M.S.C.

Surgeon-Lieutenant-Colonel Hartley served in South Africa as principal medical officer in 1877-1881 (medal with clasp). He received

the Victoria Cross for rescuing under fire the wounded at Morosi's Mountain on June 5th, 1879.

Dr. A. A. Scot Skirving (Yeomanry Hospital).
Mr. J. P. Bush (Princess Christian's Hospital).
Dr. D. Wallace (Edinburgh Hospital).
Mr. H. E. Clark (Scottish National Hospital).
Mr. A. A. Bowlby (Portland Hospital).
Dr. H. H. Tooth (Portland Hospital).
Dr. J. W. Washbourn (Yeomanry Hospital).

To be Companions of the Distinguished Service Order:—

Major (now Lieutenant-Colonel) Richard William Ford, R.A.M.C.

Major R. W. Ford served in the Egyptian war of 1882 (medal and Khedive's star).

Major (now Lieutenant-Colonel) Thomas Joseph O'Donnell, R.A.M.C.

Major O'Donnell served in the Egyptian war of 1882 (medal and Khedive's star) and served with the Bechuanaland expedition in 1884–85 and in the operations in Zululand in 1888. He served with the Kimberley relief force and was present at the action at Magersfontein (mentioned in despatches).

Major Robert James Leech Fayle, R.A.M.C.

Major Fayle entered the army in 1882 and was promoted to Surgeon-Major in 1894.

Major William Watson Pike, R.A.M.C.

Major Pike entered the service in 1882 and reached the rank of Major in 1894.

Captain Ernest Chester Anderson, R.A.M.C.

Captain Anderson entered the service in 1892 and became Surgeon-Captain in 1895.

Captain John Hay Campbell, R.A.M.C.

Captain Campbell entered the army in 1896 and was promoted to Captain in 1898.

Captain Percy John Probyn, R.A.M.C.

Captain Probyn entered the army as Surgeon-Lieutenant in 1896 and was promoted to Captain in 1899.

Captain Arthur Winsmore Hooper, R.A.M.C.

Captain Hooper entered the army in 1896 as Surgeon-Lieutenant and reached the rank of Captain in 1899.

Lieutenant John Joseph Whitworth Prescott, R.A.M.C.

Lieutenant Prescott was with the Ladysmith relief force and was present at the battle of Colenso and in the operations on the Tugela including the engagement of Vaal Krantz. Was present at the engagements at Monte Cristo and Pieter's Hill and the relief of Ladysmith.

Lieutenant Henry Edward Manning Douglas, V.C., R.A.M.C.

* Lieutenant Douglas was present at the engagement at Magersfontein in which he was severely wounded and won the Victoria Cross.

Major T. H. Fiaschi, New South Wales Army Medical Corps.

Captain A. T. Duka, Army Medical Corps, Queensland Defence Force.

Captain Duka distinguished himself at Elands River.

Surgeon-Lieutenant (temporary Captain) C. B. Keenan, Lord Strathcona's Corps.

Surgeon-Captain R. C Perkins, Brabant's Horse.

Surgeon-Major F. A. Holmden, British South Africa Police.

Captain J. J. Brownlee, Cape Medical Bearer Corps.

Surgeon-Major W. F. F. Davies, Imperial Light Horse.

Captain G. E. Heberden, medical officer, Kimberley Light Horse.

Surgeon-Major J. A. J. Smith, Kimberley Regiment.

Major J. Hyslop, principal medical officer, Natal Volunteers.

The following are noted for promotion:—

ROYAL ARMY MEDICAL CORPS.

To be Colonels:—

Lieutenant-Colonel (local Colonel) W. B. Allin, principal medical officer of the Infantry Division in South Africa.

Colonel Allin served in the Afghan war of 1878–80 (medal), with the Nile expedition in 1884–85, and had charge of the field hospital at Gakoul Wells (mentioned in despatches, promoted Surgeon-Major, medal with clasp and Khedive's star). He also served in the Isogai expedition of 1892.

Lieutenant-Colonel (local Colonel) W. L. Gubbins' Assistant Director of the Army Medical Service.

Colonel Gubbins served in the Afghan war of 1878–80 and took part with the Bozar Valley expedition under Lieutenant-General Maude in medical charge of the 5th Fusiliers and subsequently of the headquarters staff; also divisional sanitary officer and secretary to the principal medical officer. He was present with the expedition against the Mohmunds and into the Hissarek Valley (medal). He also served with the expedition to Burmah in 1886 (medal with clasp).

To be Lieutenant-Colonel under Article 562 of the Royal Warrant:—

Lieutenant-Colonel (local Colonel) A. Keogh.

To be Lieutenant-Colonels:—

Major W. Babtie, V.C., C.M.G.

* Major Babtie served in the occupation of Crete 1897–98 as senior medical officer (C.M.G.). He served in South Africa with the Ladysmith relief force and was present at the battle of Colenso, where he earned his V.C.

Major D. Bruce.

Major Bruce entered the service as surgeon in 1883 and was promoted to surgeon-major in 1895.

Major L. E. Anderson.

Major Anderson served with the Nile Expedition of 1884–85 and in the subsequent operations in the Eastern Soudan in 1885 (medal with two clasps and Khedive's star).

Major H. G. Hathaway.

Major Hathaway served with the Burmese expedition in 1885–89, and accompanied the Ruby Mine column to Mogoke; was present at the capture of Mainloung in medical charge of the column under Captain H. Earle (medal with two clasps). He served with the Chitral relief force under Sir Robert Low in 1895, including the capture of the Malakand Pass (medal with clasp), and in the campaign on the north-west frontier of India under Sir William Lockhart in 1897–98 with the Tirah expeditionary force in medical charge of the 1st Battalion Devonshire Regiment, including the capture of the Sampagha and Arhanga passes (two clasps), severely wounded in the South African war, and mentioned in despatches.

To be Majors:—

Captain T. B. Beach.

Captain Beach entered the army as Surgeon-Captain in 1891.

Captain C. W. R. Healey.

Captain Healey entered the service in 1891.

To be Captains:—

Lieutenant W. H. S. Nickerson, V.C.

* Lieutenant Nickerson entered the Army in 1898. He gained the Victoria Cross in the present campaign.

Lieutenant E. T. Inkson, V.C.

* Lieutenant Inkson entered the army in 1899. He also won the Victoria Cross in the present campaign.

Corporal A. C. Ralfe, Corporal W. L. Glasgow, and Private F. A. Farrell are also noted for promotion.

Sergeant-Major F. Crookes to be granted a bar to the Distinguished Conduct Medal already conferred upon him.

* The records of the brave and gallant actions for which these officers earned the Victoria Cross will be found in the pages of THE LANCET as follows:—Major Babtie, V.C., April 28th, 1900, p. 1230; Lieutenant Inkson, V.C., Jan. 19th, 1901, p. 200; Lieutenant Nickerson, V.C., Feb. 16th, 1901, p. 507; and Lieutenant Douglas, V.C., April 6th, 1901, p. 1038.

MENTIONED IN DESPATCHES.

ERRATUM.—Dr. H. H. Tooth's name was by error omitted from the list of names mentioned in Lord Roberts's despatch published in the *London Gazette*, page 2599. After "the Portland Hospital, under Mr. A. Bowlby, F.R.C.S.," the words "and Dr. H. H. Tooth" should be added.

MEDICAL NOTES IN NORTHERN WATERS BY A FRENCH NAVAL SURGEON.

Dr. Aurégan of the French warship *Ibis* gives a deplorable account in the *Archives de Médecine Navale* for February of the insanitary conditions under which his compatriots have to live who, to the number of close on 5000 persons, are engaged in the North Sea fishery. Throughout the winter months these unfortunate men fish for mackerel in the Channel and off the coast of Ireland, but early in May they steer for the north of Scotland in search of herrings and, following the shoals as far even as the Shetland Islands, gradually sail down the North Sea until about the month of October they arrive at the embouchure of the Thames. In nearly every one of the 300 vessels that are engaged in the trade there is only berthing accommodation for about one-half of the crews at a time, while owing to the lack of bedding the men, as a rule, turn in "all standing," no matter whether their clothing be wet or dry, and for the most part retaining their heavy boots. Under these circumstances the smells pervading the dark, damp, unventilated cabins are naturally sickening, and to make matters worse in this respect the occupants are said never to wash themselves during the whole of the time they remain at sea. In the second part of his report Dr. Aurégan describes some of the hospitals which he visited while

cruising in the *Ibis*. Except in England, where similar defects are not apparent, he is of opinion that, generally speaking, the medical wards of these establishments are too large and also that in several other important respects the medical sections fail to fulfil the desiderata of modern nosocomial hygiene. Under existing conditions classification and isolation are nearly always most difficult of attainment. Dr. Aurégan's account of the British hospitals which he inspected is brief but interesting. "At Aberdeen," he says, "the Royal Infirmary, a fine hospital of 450 beds, although of recent construction, occupies but a relatively small space. It consists of three-storeyed buildings, it is true, but these are divided up into wards for at most 20 patients. What strikes the visitor on entrance is the scrupulous cleanliness which reigns everywhere. One feels that the rules of hygiene are observed with the strictest rigour, a trait which is common to all the establishments of this kind which we have visited in Scotland as well as in England." Speaking of Edinburgh, with its "superb school of medicine," laboratories, and numerous hospitals, Dr. Aurégan, with reference to the Royal Infirmary, says: "This hospital with its annexes occupies a superficies of about 12 acres. Of recent construction and built entirely of granite it comprises 15 pavilions, each containing two wards, one above the other, for 20 beds. These pavilions are united by covered passages and those destined for surgical cases are in communication with magnificent operation-halls wherein the latest improvements of surgical science have been collected." In conclusion our friendly critic expresses himself equally favourably with regard to "the other towns of lesser importance, such as Grimsby and Lowestoft." In each port he found a handsome hospital where the sick from the *Ibis* and her "annexes" were always treated with the utmost kindness. "These establishments, although smaller and less luxurious than the foregoing, are nevertheless very elegant (*coquets*) and in them the rules of hygiene are always most religiously observed."

PARKES MEMORIAL PRIZE.

The Parkes memorial prize, consisting of 75 guineas and a bronze medal, is awarded every third year to the writer of the best essay on a subject connected with hygiene. The competition is open to the medical officers of the navy, army, and Indian services of executive rank on full pay, with the exception of the assistant professors of the Army Medical School during their term of office. The subject for the last competition was "Venereal Diseases in the British and Indian Armies, their Prevalence and Prevention." Surgeon-General McD. Cuffe, C.B., A.M.S., Colonel K. McLeod and Major R. H. Firth, R.A.M.C., acted as assessors and awarded the prize to the essay bearing the motto, "Quis quid peccat in eo punitur." The writer of the successful essay was Captain Howell, R.A.M.C.

Correspondence.

"Audi alteram partem."

SMALL-POX IN NOTTINGHAM AND ELSEWHERE.

To the Editors of THE LANCET.

SIRS,—Small-pox has recently been introduced into the Mormon headquarters in this city, apparently by letters or other fomites, from Salt Lake City. The first of our cases appears to have had a very mild attack and slight rash about Feb. 1st; the second, also a very slight one, had a rash commencing about Feb. 21st. The third and fourth were somewhat more severe than the preceding, but still very slight, and their rashes dated from about March 24th. The fifth, another extremely mild case, began to develop a rash on April 14th, at which date I first became aware of these facts and at which also the entire household were removed to our isolation hospital. The above patients' ages ranged from 22 to 33 years. Four of them are unvaccinated, and one was vaccinated in infancy. The only regular member of the household to escape infection altogether was a vaccinated male, aged 24, who was re-vaccinated in 1895. I regret to say that the outbreak has been the means of communicating small-pox to at least six other places between Liverpool and Leicester, though in single cases only, I believe, in each instance up to the present. The special cause of this general dissemination was a small Mormon conference held in Nottingham on March 24th, at which date the rashes of the third and fourth local cases were developing.

I am, Sirs, yours faithfully,

PHILIP BOOBBYER.

Health Department, Guildhall, Nottingham,
April 24th, 1901.

THE MEDICAL PROFESSION AND THE FRIENDLY SOCIETIES.

To the Editors of THE LANCET.

SIRS,—As it was at my invitation that the representatives of the medical profession did me the honour on several occasions to meet the committee of the Friendly Societies' Conference at this office I ask your permission to offer a few observations on the present position of the question between them.

When Dr. Bruce, one of the Direct Representatives of the profession, suggested the formation of a joint Board of Conciliation the suggestion was felt to be a very happy one and it would be much to be regretted that it should fall through. I am therefore glad to observe that the Friendly Societies' Conference still expresses its anxiety to secure the appointment of a Conciliation Board for the settlement of disputes between friendly societies and their medical officers and has reappointed its committee to continue the negotiations. I was also glad to observe in Dr. Elliston's letter to the secretary of that conference the proposal that the Conciliation Board "shall be entirely unfettered in its deliberations and shall be allowed to try to find a remedy for every grievance of both sides." Unfortunately, however, as I venture to think, the letter proceeds to lay down what is called the "wage-limit" as a necessary preliminary to entering upon these deliberations and has been met by a declaration that it cannot be agreed to under any circumstances. Unless this attitude can be somewhat modified on both sides the Conciliation Board is not likely to be formed.

The real question is the proper remuneration of the medical man and the wage-limit is only a part of that question, and not, I think, so important a part as both sides seem to consider it. It has been quite pertinently asked, "Do the friendly societies ask for medical relief as a charity? or do they wish to sweat the medical profession? or are they willing to pay a fair price for the services rendered to them by it?" I know them well enough to answer the question without hesitation. They desire to pay a fair price for the services rendered to them. They are neither beggars nor sweaters. How is the fair price to be ascertained? The medical man is to say, taking the society as a whole, for what sum paid by every member, whether sick or well, he is willing to attend those who are sick. He fixes that price, not at the rate at which he attends upon the very poor, nor at the rate at which he attends upon the comparatively rich, but at the reasonable rate which will, on the whole, pay him for his services. If this remuneration were not collected for him by the friendly society he might, in some cases, fail to get it at all, for the obvious reason that a man may be able to pay a small yearly sum, but not able to pay a large doctor's bill. Now, how does the circumstance that after a time one or more of the members earns more than £120 a year, which is the proposed wage-limit, affect this contract? It can only injure the medical man if that particular member happens to fall ill and if the difference between the remuneration that member would have to pay as a private patient and that upon which the medical man estimates his claim to remuneration from the friendly society is greater than the amount the medical man gains by receiving remuneration from the friendly society in cases where he would have got none at all. In other words, the contract between the medical man and the society is based on an average, and if one patient is above the average there are others who are below it. If the loss to the medical man is greater than the gain, all he has to do is to revise his terms, not necessarily to exclude from the average any particular cases. It is at that point that the operation of the Conciliation Board would be beneficial.

The constitution of a friendly society is essentially democratic. All join for the same benefit and pay according to their ages the same contribution. They do not consider anybody too good for them and do not care to be asked to exclude a member merely because he is rich. While they

know there is much in the kindly services of the medical man that no money can purchase they are willing to pay such fair professional remuneration as on the average is found to be sufficient to retain those services. I venture, therefore, as an independent onlooker, to suggest to Skill and to Thrift, the two parties to this dispute, equally admirable and worthy of respect, whether the one need insist on absolute exclusion of a member by the wage-limit test, and whether the other need insist on the absolute exclusion of the wage-limit test from consideration. Conceding these points, I think they might again approach each other and, I trust, with good result.

I am, Sirs, your faithfully,
E. W. BRABROOK.

Registry of Friendly Societies' Central Office,
Abingdon-street, S.W., April 22nd, 1901.

"LEGISLATION AGAINST NATIONAL INTEMPERANCE."

To the Editors of THE LANCET.

SIRS,—Dr. Archdall Reid and I, like the theologians, not only come to different general conclusions from our common text-book, but we do not even agree as to its facts. Rowntree and Sherwell state explicitly that "the total *per capita* consumption of absolute alcohol (in spirits, wine, beer, &c.) in Norway" in 1833 was "estimated" at 8·5 litres, in 1843 at 5·5; in the quinquenniad 1851–55 the "actual" consumption was 3·9, in 1861–65 it was 2·7, in 1871–75 it was 3·6, in 1881–85 it was 2·4, in 1891–95 it was 2·6, and in 1894–98 (the latest returns) it was 2·4. How "drunkenness has greatly increased in Norway of late years" on a greatly diminished quantity of alcohol passes my comprehension. The arrests for drunkenness form a most fallacious basis of conclusion. I know a Scotch county in which there are no arrests for drunkenness, but I wish I could state that there is no alcoholic excess there. In a country whose authorities are keen to put down drunkenness, as is the case in Norway now, a few habitual inebriates each arrested every week will soon run up the arrests to 5·8 per 1000 inhabitants in any of its cities. I surely think that Dr. Reid will not deny that this evidence as adduced in Rowntree and Sherwell does as a whole fairly prove that recent legislation in Norway has diminished drunkenness and that in consequence the morals and the health of the people there have improved.

I have just re-read Dr. Archdall Reid's chapters on alcohol in "The Present Evolution in Man" with increased interest and undiminished admiration of his sternly logical mind. But I am far from satisfied that he fully proves his case and that no other hypothesis than his will explain the facts. I, and many others better qualified to judge than I am, absolutely dispute his cardinal theory "that the craving for alcohol, like sexual love, is an instinct not an acquired trait." We think his analogy is unscientific and his conclusions based on it fallacious, but we admired his ingenuity of mind, even when his theory led him to the logical abysses of "alcoholic retrogression," and to the proposition that "racial abstinence from alcohol must have for ultimate result only excessive racial indulgence in the poison." Dr. Reid's desire to benefit the race is no doubt as great as that of any other thoughtful man. His whole practical remedies for the direful effects of excessive alcohol on mankind are thus summed up: "We must either permit alcoholic selection to run its level course or we must assist it by artificial selection and so prevent much of the misery by weeding out the obviously unfit—either by forbidding marriage to drunken individuals, or in the married by preventing the procreation of children by separating the parents or such other means as science may devise." He fully admits the bad effects of alcohol in excess on the present generation of men in health and morals. But because he is so down on the "diminution" of the "alcoholic supply," on "total abstinence, local veto, the Gothenburg system, &c.," as measures that "will—must—result in the aggravations of the craving for that state of mind which indulgence in alcohol induces," I and many more consider his alcoholic theory dangerous. We also think his proposed remedies impracticable and insufficient. I cannot see why a scientific logician like Dr. Reid should resent the logical outcome of his theory, which is certainly this: "Alcohol craving is a universal instinct; its only cure is alcoholic evolution; therefore let us permit alcoholic selection to run its cruel course."

Dr. Laing Gordon in his letter exhibits more zeal than discretion in defence of his master and more assurance than courtesy in his methods of controversy.

I am, Sirs, yours faithfully,
Edinburgh, April 22nd, 1901. T. S. CLOUSTON.

To the Editors of THE LANCET.

SIRS,—I have done Dr. Archdall Reid the justice of reading most of, if not all, his letters and papers on this alcohol and heredity question, but I am afraid I have not yet grasped his meaning. At one time Dr. Reid appears to me to deify alcohol and at another time he seems to recognise that there is a drink evil. Again, his writings leave the impression that he feels that alcohol has not had fair play, because if it had had fair play it would regenerate the human race by weeding out the weaklings and leave behind only those proof against its evil influences. The next time, Dr. Reid varies his assertions by stating that for 1000 years the old methods have been tried and found wanting. This practically means that King Alcohol has had absolute sway for the space of 1000 years, a sufficiently long one, one would have thought, for effecting the weeding-out and regenerating processes. In one communication Dr. Reid tells us the peoples whose experience of alcohol is the longest and most intimate are those who are the least susceptible to its evil influence. This runs counter to the history of the human race. All peoples have known alcohol in some shape or form from their remotest antiquity. Even such peoples as the ancient Aztecs and Peruvians, who had the beverages cocoa and teas of various kinds, had also alcoholic beverages. On the point relating to resistance, the Germans were great drinkers so far back as the days of Tacitus. Tacitus tells us that they drank strong beer and often passed an entire day and night in drinking, yet this long acquaintance with alcohol has not rendered them immune to its subtle influence, for only within the last few months the Socialists of Germany have become so alarmed at the ravages of alcohol that they petitioned the Legislature to take the question up. Switzerland, like Germany, has had a fair experience of alcohol in one shape or another, and recently the Socialists of the various cantons have also presented petitions fortified by hard facts telling of the havoc of alcohol among the workers of their land. France has long had her wines and her people have not become immune to alcohol. Surely Dr. Reid cannot be ignorant of the growing drink evil in fair France nor of the repeated pathetic appeals to the Legislature presented by the learned Academy of Medicine of Paris crying for reform because of the evil which alcohol is working among the people of France. Spain, too, the land of wines, shows an alarming increase of drinking among her people. Now, according to Dr. Reid's theory, these peoples should all be immune to alcohol.

Dr. Reid's persistence is admirable but worthy of a better cause. His may be described as the philosophy of pessimism of the Schopenhauer type with the humour left out. No old Calvinistic divine more determinedly preached the salvation of the few and the damnation of the many than does Dr. Reid. But the Calvinistic divine believed in the awfulness of sin, whereas Dr. Reid teaches the benignity of evil as seen in the ravages of alcohol. Now suppose he were to apply the same process of reasoning to the small-pox evil which he so trenchantly employs with regard to alcohol he would use the language of Epictetus and the Stoics and say to the citizens of Glasgow: "The outbreak of small-pox in your midst is nothing. It is salutary and it will weed out the weaklings; then why do you try to stop its progress? Rather rejoice in the visitation." What would the citizens of Glasgow think of such advice? I am pretty sure the medical officer at least would imagine that Dr. Reid had never heard of Francis Bacon and the experimental philosophy and that he had never heard of sanitation and vaccination. We try to protect the people by sanitation and vaccination. Likewise those of us who try to save the people from the allurements of alcohol are Baconians and we hope and believe our efforts will meet with success. Personally, I am willing to acknowledge the purity of Dr. Reid's motives. At the same time I implore him to spare himself the unceasing energy with which he attacks the labours of earnest temperance reformers. His attitude is productive of no good and if he honestly feels he

cannot speak words of comfort and encouragement then silence is the better part.

I am, Sirs, yours faithfully,

St. George's-terrace, Leeds, April 22nd, 1901. GORDON SHARP.

"THE TEACHING OF ANÆSTHETICS."

To the Editors of THE LANCET.

SIRS,—It will probably be a couple of months before we can get Lieutenant-Colonel Lawrie's answer to Dr. Hewitt's letter in THE LANCET of April 20th, p. 1066. But as I came across yesterday, by a curious coincidence, an instruction concerning the administration of chloroform given by a foreign surgeon which supports Lieutenant-Colonel Lawrie in a statement which has drawn down on him Dr. Hewitt's high scorn I beg that you will note it next week. Dr. Hewitt's quotation from Lieutenant-Colonel Lawrie is: "The way to make a young child breathe regularly is to make it cry by holding the chloroform cap close down over its mouth and nose until it becomes unconscious and quiet," on which he remarks: "It is, I think, unnecessary to further criticise the above doctrines; they speak for themselves." The quotation from Léjars' "Chirurgie d'Urgence," which you recently criticised most favourably, is: "Il y a une autre méthode qui brusque les choses: la compresse, imprégnée de chloroforme, est appliquée sur la bouche et le nez et tout de suite hermétiquement fermée. Cela réussit chez l'enfant, et chez l'adulte entre des mains exercées." He goes on to say that he prefers persuasion, but that he has spoken as above shows, I think, that Lieutenant-Colonel Lawrie's views are more widely held than Dr. Hewitt supposes. If Dr. Hewitt wishes to convert them he will do so more effectually by argument than by scorn. I am, Sirs, yours faithfully,

April 21st, 1901. W. E. HOME.

"THE MANAGEMENT OF HOME MILITARY HOSPITALS."

To the Editors of THE LANCET.

SIRS,—Having read the article under this heading by Surgeon-Captain Pugin Thornton in THE LANCET of March 30th, p. 958, I notice that he has omitted to state what becomes of the soldier when sick *on leave* if not in the vicinity of a military hospital. Such cases are constantly cropping up in this town, and it is interesting to compare the neglect of arrangements made by the military authorities with the excellent ones in force in the navy. In the case of the soldier he is probably on furlough, staying with his family or friends. He falls ill and requires medical assistance; he is too ill to be sent to a military hospital and has therefore to be treated at home. He has to find board and lodging for himself; special diets or medical comforts, if demanded by the necessity of the case, also fall upon him. If his medical attendant gets paid for the services rendered at a critical and urgent time the soldier has to pay for them himself. But, as a matter of fact, it more often happens that the soldier requests the medical man to forward the account at the end of the attendance to his commanding officer, and the medical man, innocent of guile, having found that his bi-weekly certificates are accepted by the commanding officer, finds it a very different thing when he sends to the commanding officer the account of his fees at the end of the attendance.

In the many cases that have come under my own observation no notice whatever has been taken of these accounts when duly sent in, and there appears to be no way for recovery of the fees for the attendance. In some few cases the soldier has said at the beginning that he is himself responsible for the attendance, and has done his best honestly to meet it. In these cases I consider it a great tax that a soldier on leave should be obliged to pay for medical attendance just because he happens to be on furlough away from a military hospital. In one case it is unfair to the doctor, in the other unfair to the soldier.

Now let us turn to what obtains in the sister service. The navy is mostly recruited from seaport towns, and all round the coast of the British Isles there are civil surgeons appointed by the Admiralty to the medical charge of the coastguard, and it is a part of the duty of these surgeons to attend any officer or man of His Majesty's Navy who may fall sick when on leave. The surgeon is empowered to place the patient in quarters; to pay for his board and lodging, nursing, and medical comforts, if necessary; and at stated times to send in his account to the Admiralty.

I am, Sirs, yours faithfully,

CHARLES COTTON, F.R.C.P. Edin.

Ramsgate, April 20th, 1901.

"INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE."

To the Editors of THE LANCET.

SIRS,—Will you allow me to add a note to the letter which appeared in your issue of March 9th, p. 736? In the list there given the section of anthropology is not mentioned. Scattered among papers of purely medical importance, however, appears a considerable number of articles bearing on anthropological questions which it will be only too easy to overlook, especially if the journals or books are not readily accessible. May I ask authors to send separate copies of their publications, or in default of that, a note of place and date of publication and of the main contents of the paper, to the Anthropological Institute, 3, Hanover-square, London, W. I am, Sirs, yours faithfully,

Hanover-square, W. NORTHCOTE W. THOMAS.

"THE X RAYS IN SOUTH AFRICA."

To the Editors of THE LANCET.

SIRS,—In a letter on this subject which you were good enough to publish in THE LANCET of Jan. 19th last, p. 212, I stated that the apparatus sent out by the War Office for use in the military hospitals in South Africa was that known as the "army pattern made by Apps and Newton." Mr. Harry W. Cox, of Cursitor-street, London, E.C., by order from the War Office, sent out three sets of apparatus of his own manufacture and has asked me to correct my former statement to this effect. This request, if you will grant me space to do so, I shall be glad of an opportunity of complying with.

I am, Sirs, yours faithfully,

W. F. STEVENSON, Colonel, R.A.M.C.

Netley, April 22nd, 1901

"THE STATISTICS OF GASTRIC ULCER, WITH SPECIAL REFERENCE TO GASTRIC HÆMORRHAGE, ITS FREQUENCY AND FATALITY."

To the Editors of THE LANCET.

SIRS,—I hardly think I need add anything to my letter in THE LANCET of March 30th, p. 969. Let me, however, thank Mr. Mayo Robson for the references which he has published, and let me say that those references entirely confirm my statement—viz., that the mortality percentages from hæmorrhage in gastric ulcer, given by the authorities which Mr. Mayo Robson quoted in his address, refer not merely to those cases of gastric ulcer in which hæmorrhage occurs, but to *all* cases of gastric ulcer.

Let me further say that, so far as I see, it is impossible to reconcile the estimate which Mr. Mayo Robson has drawn from those figures—viz., that 7 per cent of cases of hæmatemesis from ulcer, or 3½ per cent. of all persons suffering from ulcer, die as the result of bleeding—with those figures—viz., Müller, 11 per cent.; Welch, 3 to 5 per cent.; Brinton, 5 per cent.; Debove, 5 per cent.; Steiner, 6·36 per cent.; Lebert, 3 per cent.; Dreschfeld, 3½ per cent.; and Rodman, 8 per cent.—unless, first, it be granted (and this is, as I have shown, an erroneous reading of the figures) that those figures refer to the mortality percentages in those cases of gastric ulcer in which hæmorrhage occurs (which Mr. Mayo Robson estimates at 50 per cent.); and, secondly, unless the mean (7 per cent.) of the extremes (11 per cent. and 3 per cent.), and not the average, of those figures is taken. The average of the figures is just about 5½ per cent. Let me also add that the mortality percentages of Lebert and Leube (Rodman), which Mr. Mayo Robson quotes, do not, according to my reading, represent the figures of those authorities (see *addendum*).

I hope one result of this discussion will be finally to "knock out of time" Brinton's estimate—that the total

mortality in cases of gastric ulcer is 50 per cent. It does not seem to have occurred to Mr. Mayo Robson that he has taken up a singularly illogical, and, in fact, untenable, position in upholding Brinton, while, at the same time, he "heartily concurs" with my argument that, since the cicatrices of small and superficial ulcers are often missed, the ratio of three cicatrices to one open ulcer (which is the ratio commonly accepted by modern authorities) is probably an under-estimate. Brinton's estimate is essentially based on the supposition (which Brinton believed to be a fact) that the ratio of cicatrices to open ulcers is as one to one. Hence he (Brinton) concluded that only 50 per cent. of gastric ulcers undergo a spontaneous cure; in other words, that the total mortality (direct and indirect) in cases of gastric ulcer is 50 per cent. Now, if it be granted that the ratio of cicatrices to open ulcers is at least three to one, it necessarily follows that Brinton's estimate is extravagantly erroneous.

I have no wish to prolong the discussion, which, though of very great practical importance (since the statistics of gastric ulcer necessarily form one of the factors on which physicians and surgeons will have to determine the operative question), is, after all, merely preliminary to the main question—viz., whether operative interference is advisable for the treatment of hæmorrhage in cases of gastric ulcer, and, if so, in what cases it should be undertaken. On this, the main question, I have a good deal more to say.

I am, Sirs, yours faithfully,

Edinburgh, April 18th, 1901. BYROM BRAMWELL.

ADDENDUM.

The following is my reading of the percentage fatalities from hæmorrhage quoted by Mr. Mayo Robson in his address:—

Müller, 11 per cent.[1] (Das Corrosive Geschwür, 1880, p. 91).—"In 120 cases of gastric ulcer hæmorrhage occurred in 35, and of these 14 were fatal"; that is, a mortality of 11 per cent. in all cases of gastric ulcer. (Savariaud in his Thesis, p. 51, quotes these figures incorrectly—viz., 127 ulcers and 37 cases of hæmorrhage, instead of 120 ulcers and 35 cases of hæmorrhage, and Mr. Mayo Robson quotes Savariaud).

Welch, from 3 to 5 per cent (Pepper's System of Medicine, vol. ii., p. 502).—"Death from hæmorrhage occurs probably in from 3 to 5 per cent. of the cases of gastric ulcer. In 270 cases of open ulcer from the statistics of Jaksch, Dittrich, Eppinger, Starcke, Chambers, Habershon, Moore, and Lebert, I find 27 deaths by hæmorrhage. Reckoning three cicatrices to one ulcer this would give a percentage of 3¼."

Brinton, 5 per cent. (Diseases of the Stomach, p. 153).—"In 3·5 per cent. of the cases of gastric ulcer death is due to hæmorrhage."

Debove, 5 per cent. (Ulcère de l'Estomac, p. 101).—Debove and Renault give no estimate of their own, but merely quote Brinton's estimate, giving it at 5 per cent. and not, as Brinton gives it, at 3 to 5 per cent.

Steiner, 6·36 per cent.—There is, so far as I see, no mention of the mortality from hæmorrhage in the abstract of Steiner's pathological observations in Virchow and Hirsch's Jahresbericht, 1868, p. 125—the reference which Mr. Mayo Robson gives. The mortality is given in Steiner's Dissertation, "Das Chronische Corrosive Magengeschwür," Berlin, 1868 (I have not been able to consult the original), quoted (as Mr. Mayo Robson points out) by Leube in Ziemssen's Cyclopædia, vol. vii., p. 217: "In 110 cases of gastric ulcer fatal hæmorrhage occurred in seven"; giving a mortality of 6·36 per cent. in all ulcers.

Lebert, 3 per cent. (Die Krankheiten des Magens, 1878, pp. 237 and 238).—If I read Lebert rightly, he does not make the mortality from hæmorrhage 3 per cent., but 1·3 per cent. He observed 300 cases of gastric ulcer—252 in the clinics and polyclinics of Zürich and Breslau, and 48 in the Paris hospitals and in private practice. Of these 300 cases of gastric ulcer 33, or 11 per cent., died, and of the 33 fatal cases four, *or 1·3 per cent., of the 300 cases of ulcer died from hæmorrhage.* Mr. Mayo Robson is, I think, mistaken in saying that Lebert's figures on this point (the mortality from hæmorrhage) are quoted by Dreschfeld in Clifford Allbutt's System of Medicine, vol. iii., p. 541. They are, however, quoted—and I think, erroneously quoted—by Savariaud (L'Ulcère Hémorrhagique de l'Estomac, 1898, p. 51) as follows: "Lebert, who observed 252 cases, found 3 per cent. died from hæmorrhage." Lebert's statement, according to my reading, is given above.

Dreschfeld 3½ per cent. (Clifford Allbutt's System of Medicine, vol. iii., p. 541).—"Death from hæmorrhage is said to occur in about 3 per cent."

Rodman, 8 per cent. (Journal of the American Association, June 16th, 1900, p. 1509).—"Hæmatemesis occurs in at least 50 per cent. of all cases of gastric ulcer, and many authorities estimate it as present in 80 per cent. It is, too, fatal in 8 per cent. of the cases in which it occurs, according to the conservative estimate of Leube (*Archiv für Klinische Chirurgie*, 1897), and we cannot question that it is indirectly fatal in a much greater number of cases by anæmia and its remote consequences."

Rodman seems to have misread Leube, for, according to my reading, Leube's 8 per cent. refers *not* to the fatality of hæmorrhage in gastric ulcer, but to the *total* fatality of gastric ulcer. Leube (*Archiv für Klinische Chirurgie*, 1897, p. 73) says: "Ich habe berechnet, dass von 195 Patienten, die vor oder nach der Behandlung Magenblutungen zeigten, 8, also etwas über 4 per cent., mit Tod abgingen, während nach den gewöhnlichen Rechnungen die Mortalitätszahl beim Ulcus 13 per cent. und noch mehr beträgt." Or, as I translate it: "I have calculated that in 195 patients in whom bleeding from the stomach occurred, either before or after treatment, eight, or about 4 per cent., died, whereas according to the usually accepted estimates, the mortality from gastric ulcer is 13 per cent. or more." Leube then goes on to give the details of his own cases. He observed 556 cases, 83 in private practice and 493 in hospital practice. Of these 556 cases of gastric ulcer 12 died, making the total mortality 2·15 per cent.; and of the 12 fatal cases six died from hæmorrhage, *giving a mortality from hæmorrhage of 1 per cent.* He contrasts his total mortality of 2·15 per cent., and his mortality from hæmorrhage of 1 per cent., with the usually accepted estimates, based on old and recent statistics, which give the total mortality from gastric ulcer at 13 per cent. or more and the mortality from hæmorrhage at 5 per cent. Thus, according to my reading, Rodman misread Leube, and in his address Mr. Mayo Robson quotes Rodman's misquotation of Leube as if it were Rodman's original estimate. This is merely one illustration of the way in which the statistics and mortality percentages of gastric ulcer are quoted, requoted, and misquoted.

[1] The figure which immediately follows the author's name (Müller, Welch, &c.) is Mr. Mayo Robson's quotation.

"NEUTRAL RED AS A MEANS OF DETECTING THE PRESENCE OF THE BACILLUS COLI COMMUNIS IN WATER-SUPPLIES."

To the Editors of THE LANCET.

SIRS,—A note bearing the above title was published in THE LANCET of April 13th, p. 1079, and as I was out of London during the week previous to the insertion of this note I did not have an opportunity of correcting the proof which was submitted to me. As one or two points appear to me to be far from clear the following may be useful. Nutrient media, especially peptone bouillon, containing neutral red, form a delicate test for the presence of bacillus coli communis. Thus one cubic centimetre of unsterilised tap water containing from 10 to 20 bacilli coli per cubic centimetre, mixed with neutral red bouillon and incubated at 37° C., will give a marked reaction within 24 hours. If, however, the bacilli only number from three to four per cubic centimetre the reaction is usually delayed until the second day. By noting such differences in the time required to produce the reaction a fairly accurate idea of the proportions of bacillus coli communis present in a water can be gained. Dr. Makgill (late of New Zealand) has been making a number of experiments in regard to this question and intends to publish soon the results of his investigations more in detail.

I am, Sirs, yours faithfully,

London Hospital, E., April 17th, 1901. WILLIAM HUNTER.

WIDE-BORE CLOVER'S INHALERS.

To the Editors of THE LANCET.

SIRS,—In Dr. Frederic Hewitt's lecture published in THE LANCET of March 30th, p. 916, I am interested to see an account of an improved Clover's ether inhaler with a wide bore or calibre, and also that Dr. Hewitt finds that the "principal difference" thereof "is that stertor and cyanosis are lessened and that the patient passes smoothly with little or no respiratory derangement from the anæsthesia of nitrous oxide to that of ether." Dr. Hewitt states that he has used this apparatus for upwards of a year in private practice.

In April, 1898, you published a description of an improved Clover's inhaler designed by me and made by Messrs. Mayer and Meltzer. At the same time, by my instructions, Messrs. Mayer and Meltzer made for me a *wide-bore* Clover's inhaler on the same principles save for the introduction of the wider bore. I have used this wide-bore inhaler exclusively since February, 1898, with every satisfaction, and from three years' experience can fully endorse Dr. Hewitt's remarks as to the quietness of breathing and ease with which patients pass from gas to ether anæsthesia. The difference in ease of breathing with the wide- and narrow-bore Clover's inhalers respectively is strikingly demonstrated by breathing through one and then immediately substituting the other.

I have no doubt that Dr. Hewitt's explanation that with the narrow-bore inhalers a negative pressure is produced within the upper air-tract is the correct one. There is also a corresponding, though reversed, feeling of effort during expiration with the narrow-bore inhalers. I think that the late Mr. Clover, notwithstanding his ingenuity, must have forgotten in designing his smaller inhaler that the central tube, roughly about the area in section of the human trachea, has only half this area available for respiration, by reason of the dividing septum. Any inhaler on Clover's pattern, to allow of full ease in respiration, must be made with a central tube of an area in section equal to double that of the trachea, thus allowing for an area, in section equal to that of the trachea,

on each side of the septum dividing the central tube. It was on this principle that I designed my wide-bore improved Clover's inhaler more than three years ago.

I am, Sirs, yours faithfully,

Bath, April 19th. T. WILSON SMITH, M.D. Lond.

"A WATER COMPANY DIRECTOR ON CISTERNS."

To the Editors of THE LANCET.

SIRS,—I thank you for your courtesy in sending me THE LANCET of 20th inst. with the note on the *Times* report of my remarks at the general meeting of the East London Waterworks Company, necessarily much condensed. I had in view the statements made to me by Mr. H. Mansfield Robinson at one of the sittings of the Local Government Board inquiry on the proposed regulations as to the dirty state of many cisterns in the poorer parts of Shoreditch and the contaminations discovered in them. Where this is the case I think you will support the view that if the authorities are powerless to insist on proper cisterns and their being cleansed the water for drinking purposes should be drawn from a tap on the rising main.

The suffering unhappily experienced in East London during the drought was mainly due to insufficient supply for cleansing and general purposes and would have been greatly mitigated had there been even a small cistern in every house.

I am, Sirs, yours faithfully,

Tunbridge Wells, April 21st, 1901. F. TENDRON.

"THE TRAFFIC IN OLD HORSES."

To the Editors of THE LANCET.

SIRS,—I have read in your issue of April 13th, p. 1095, an annotation entitled "The Traffic in Old Horses," in the course of which the writer observes: "We have not, however, seen reported a single case where punishment has been inflicted under the Diseases of Animals Act and the Order of the Board of Agriculture, and we should be glad to know why magistrates and others do not use the powers to which they are entitled." Allow me to point out that the first two lines of your annotation furnish the answer to your inquiry. Our officers not being allowed on the wharves stop the horses *en route* to the docks, and, as you have shown, obtain convictions for travelling such horses when lame or unfit—convictions occurring almost daily; thus the action of the society prevents the cruelty of transporting such animals to continental cities.

I am, Sirs, yours faithfully,

JOHN COLAM,

Secretary to the Royal Society for the Prevention of Cruelty to Animals.

Jermyn-street, S.W., April 17th, 1901.

CIVIL SURGEONS IN SOUTH AFRICA.

To the Editors of THE LANCET.

SIRS,—A desire has been generally expressed by men recently serving as civil surgeons in South Africa to hold a dinner. Derby Day, Wednesday, June 5th, the anniversary of the occupation of Pretoria, is suggested for the purpose. It is proposed to include all civilian medical men, whether attached to the Royal Army Medical Corps or to private hospitals. Sir W. Mac Cormac has consented to preside and the following surgeons have already expressed their intention of being present: Mr. Makins, Professor Chiene, Mr. Watson Cheyne, Mr. Fripp, and Sir William Thomson.

The following provisional committee has been formed:—Mr. Anthony A. Bowlby (chairman of committee), Mr. C. S. Wallace (St. Thomas's), Dr. E. A. Houseman (St. George's), Dr. A. Conan Doyle (Edinburgh), Dr. J. F. R. Gairdner (Glasgow and Leeds), and Mr. E. L. Hunt (Dublin).

We shall be glad to receive suggestions at the address given below, and we hope to publish details at a later date.

We remain, Sirs, yours faithfully,

C. GORDON WATSON (St. Bart.'s),
FRANCIS E. FREMANTLE (Guy's),
Acting Secretaries.

39, Moore-street, Lennox-gardens, S.W.

"BICYCLING IN LONDON."

To the Editors of THE LANCET.

SIRS,—As a lady cyclist who is accustomed to ride in almost every part of the metropolis I cannot refrain from protesting against what appears to me the somewhat exaggerated view of the dangers of bicycling in London expressed in an annotation on that subject in THE LANCET of April 20th, p. 1154. Contrary to the opinion of the author of that article I find that one of the great advantages of bicycling in London is the freedom from nerve wear and tear it affords as compared with some other methods of locomotion. One avoids the worry of catching or missing omnibuses and trains, the irritation often produced by the dilatory progress of these means of transport, the anxiety that one will be late for one's appointment. Driving in a hansom is, in my experience, frequently a succession of small nerve shocks. What with curbstones which are grazed, absent-minded pedestrians who appear to escape as by a miracle being run over, horses that flounder and threaten to fall, one's nerves are often kept in a state of tension from which the practised cyclist is wholly free. When cycling the speed is in one's own hands. What one loses in crowded roads can be made up for in quieter parts. One feels absolute control over one's machine, a control more complete and more rapidly exercised than that over any horse. There is enough muscular exertion to produce a feeling of pleasant exhilaration; just enough skill and alertness are called for to give brain and eye healthy exercise.

Whether bicycling in London is dangerous or not depends very largely on the cyclist. The crowded thoroughfares of the metropolis are far from being a sort of pandemonium, as suggested by the article referred to; the traffic is perfectly regulated, every horse is well under control. So long as the cyclist keeps his place he is no source of danger either to himself or others. The cyclist who courts danger and annoys drivers is he who presumes on the superior agility and speed of his machine as compared with other vehicles and darts through the traffic, dodging horses' heads on one side and shaving wheels on the other. It is often said that ladies are among the most reckless riders in London streets, but this, I think, is wholly untrue. Incompetent riders and nervous riders one sees, neither of whom are fit to cycle in crowded thoroughfares, but the foolhardy expert is almost invariably of the opposite sex. It often makes one shiver to watch cyclists, newspaper carriers especially, who dash through the traffic over greasy roads as if side slips were non-existent.

The best way, I think, for a lady to learn to ride safely in traffic is to make a point of dismounting and walking whenever the traffic or condition of the road makes her feel the least nervous. She will gradually find she dismounts less and less frequently and gains confidence while avoiding the chance of getting into tight places. Personally I feel far happier on a bicycle at certain crossings—Trafalgar-square, for instance—than I do on my feet. I do not advocate riding in muddy weather, but I believe that it is far more possible than is generally supposed for the cautious rider to ride safely on greasy roads if he bears constantly in mind the possibility of a side slip and acts accordingly.

I am, Sirs, yours faithfully,

April 22nd, 1901. M.D. LOND.

*** "At about 9.45 this morning a young lady, who was cycling along the Holloway-road, slipped, and an omnibus following passed over her. She was removed to the Great Northern Hospital, but expired before arrival."—(*Evening Standard*, Tuesday, April 23rd, 1901)—ED. L.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Water-supply of Bombay City and other Indian Cities.—The Utilisation of Garbage by Municipalities.—Features of the present Plague Mortality.—The Distribution of Prizes by the Gaekwar of Baroda.

THE water-supply of Bombay city from the Tansa, Vehar, and Tulsi lakes has justly been a matter of pride to the municipality for many years and I am glad to see by a recent analysis by one of the health officers that it maintains its purity. It will be remembered that last year during the autumn some suspicion was cast on the water supply and vibrios in abundance were found in the water. At the same time a marked increase in the albuminoid ammonia was discoverable which was attributed to algoid growth. The following, however, is the recent analysis:—

Tansa Water.—Total solids, 8 grains per gallon; chlorine, 0·8 grain

per gallon; free ammonia, 0·008 part per 1,000,000; albuminoid, 0·09 part per 1,000,000; no nitrites and no vegetable growths.

Vehar Water.—Total solids, 3 grains per gallon; chlorine, 1·2 grains per gallon; free ammonia, 0·002 part per 1,000,000; albuminoid, 0·064 part per 1,000,000; no nitrites.

Tulsi Water.—Total solids, 6 grains per gallon; chlorine, 1·2 grains per gallon; free ammonia, 0·002 part per 1,000,000; albuminoid, 0·072 part per 1,000,000; no nitrites.

The available daily supply is very large. A recent return shows that Allahabad uses about 1,500,000 gallons a day at a cost of one and a half annas per 1000 gallons, Agra about the same daily supply at one and seven-twelfth annas per 1000 gallons, Lucknow rather more than 1,000,000 gallons at two and one-twelfth annas, and Benares two and two-third million gallons a day at two and one-third annas. Meerut uses well water which is very expensive, and Mussoorie has a notoriously inadequate supply. Attention has already been drawn to the increasing death-rate of these cities and the census returns show but a small increase in the population.

The conservancy of Calcutta has always been a matter of difficulty as the amount of refuse to be carted away daily is enormous. The greater part is taken outside the town and deposited in what is known as the "salt lakes," but a portion has been burnt in two Harrington incinerators. It is contemplated to establish more of these works as they will effect a considerable saving on the annual cost of removing garbage. The inventor claims that a boiler attached to this incinerator would maintain sufficient steam to work the machinery for lighting Calcutta with electricity.

Notwithstanding the thousands of cases of plague which have occurred in Calcutta I understand that there has been only one victim amongst Europeans. This was Major Evans, I.M.S., who was thought to have contracted the disease while making a post-mortem examination. This week the house surgeon of the Gara Hospital has died from plague; he was a native of India. The plague mortality throughout India is still enormous, although there has been a slight decline during the past week from 11,509 to 11,480. In the corresponding week last year the plague deaths numbered 5196. The disease for the moment is stationary in the Bengal districts and in Calcutta, and there is a decrease in the Bombay Presidency. In Benares city, however, the outbreak has become severe and over 100 deaths have been recorded in one day. It is still raging in Karachi and the total of cases and deaths in that city since Jan. 26th gives the mortality at 75 per cent. In Calcutta the total of cases and deaths since Jan. 1st gives a mortality of 84 per cent. As the excess mortality of the city is nearly all accounted for by the plague deaths it probably means that a large number of non-fatal cases do not come before the authorities. At the present time about 1000 deaths from plague are occurring each week in Calcutta, but there appears to be some sign of the plague mortality decreasing. A coincident minor outbreak of small-pox has been existent which has helped to swell the lists of general mortality. In Bombay city the outbreak is declining, but 705 deaths from plague were registered last week. The general mortality was 1716 against 1949 in the previous week—a rate of over 115 per 1000 per annum. The excess mortality is apparently due to plague because there is no other fatal epidemic disease present.

The Grant Medical College, Bombay, was fortunate in obtaining the presence of the Gaekwar of Baroda at the recent distribution of prizes. The Indian prince made a very excellent speech and referred to the advantages of a university education, the march of science, particularly with regard to medicine, the need of India for scientific education, and the importance of hygiene. He also touched upon the desirability of investigating Indian medicines and upon medical colleges in India. His Highness was very enthusiastically received and his address will doubtless prove of great value to the college. It was, however, more than an appeal to students, it was a valuable lesson to the whole native population of India. The stimulus of such an address must be far reaching, not only from its intrinsic merits, but from the great influence which the Prince possesses.

April 6th.

HEALTH OF KEYNSHAM.—Mr. J. C. Heaven in his annual report as medical officer of health of the Keynsham Rural District states that the estimated population in 1900 was 7542. The death-rate, including the deaths of 10 visitors, corresponded to a rate of 15·9 per 1000. The birth-rate was 25·3 per 1000.

THE INTERNATIONAL ASSOCIATION OF THE MEDICAL PRESS.

(FROM OUR SPECIAL CORRESPONDENT.)

THE British medical press will receive at an early date an invitation to appoint delegates so as to discuss and to draw up the statutes that are to govern the International Association of the Medical Press. It will be remembered that an International Congress, the first of its kind, was held from July 26th to July 28th, 1900, at Paris, during the Universal Exhibition. More than 200 representatives of medical journals were members of that Congress and the majority of the civilised countries of the world thus participated in the gathering. Many subjects were discussed, but the thing was so new to the members that very few practical decisions were taken. The main result was a unanimous agreement that an international association of the medical press should be established. It was felt, however, that it would be premature to define with any precision the object and rules of such an association. The Congress decided that the committee which had organised the Congress should be empowered to draw up a scheme of rules, and it is this scheme that will shortly be issued to the various countries which were represented at the Congress. In the meanwhile, efforts were to be made in the various countries to group the medical journals and thus to constitute national associations of the medical press that could express an opinion on the scheme. So far nothing of the sort has been attempted in Great Britain. Each national meeting will be called upon to appoint delegates to represent its views, and to move such alterations of the proposed rules as it may judge expedient at the next International Congress. It was decided last year in Paris that Germany and Austria should appoint four delegates, England, France, Italy, and the United States of America three delegates each, Spain and Russia two delegates each, and the other nationalities one delegate each. The next International Congress of the Medical Press will meet at Brussels on Sept. 20th of this year and all representatives of medical periodicals will be allowed to become members of the Congress. But the delegates mentioned above are to meet a day or two before the general Congress. They are then to submit their amendments to the draft of the rules and to come to a joint agreement as to the project of rules to be proposed to the Congress for definite adoption. This preliminary meeting of the delegates will be more important from a business point of view than will be the Congress itself. It must be acknowledged that every precaution has been taken to ensure that the rules shall be thoroughly international in character and in harmony with the opinions of the majority. The first scheme of rules, though drawn up by the French committee, will be based upon the discussions which were held last year and at which most nations participated, and each nation will separately be able to criticise and to suggest alterations of these rules. Then the delegates of these nations on meeting at Brussels will try to weld together their different suggestions, and finally the International Congress as a whole will confirm or alter this project. The members of the French committee are Professor V. Cornil, Professor Charles Richet, Dr. R. Blondel, Dr. Laborde, Dr. Marcel Baudouin, and also Professor Posner of Berlin. It is these gentlemen who are to prepare the draft of rules which will soon be sent to all the nations concerned and which the medical press will be called upon to criticise, and subsequently to appoint delegates to convey their criticisms to the Brussels Congress. The secretary of this the forthcoming Second International Congress of the Medical Press is Dr. Pechere, 140, rue de la Loi, Brussels, to whom all communications relating to the Congress should be addressed.

Thus the matter stands at present and the next question is, What action will be taken by the medical press of this country? The main difficulty arises from the very different character and position of the medical journals in various countries and even within the frontiers of any one particular nation. Yet, in spite of this, there may be some common ground of agreement. For instance, it is proposed to establish, on coöperative principles, a central international bureau of information. The editors of the various papers could send, probably in the French language, as being the

language most widely understood, brief summaries of any important article they may publish which would be forwarded by the central bureau to all the papers belonging to the association. Thus each paper would receive for quotation press cuttings of what the editors of a great number of papers themselves thought was the most important matter published in their columns. This might not be considered very useful by papers which have regular correspondents in the principal capitals of Europe, but it would be of service even to such papers when the information came from smaller countries. In Denmark, Norway, Switzerland, and other small or distant countries much good work is done that remains ignored by the world at large because there is no regular system of correspondence and because, in many cases, the language spoken in these countries is scarcely known beyond their frontiers. Again, there is a great deal to be done in regard to the ethics of the medical press. First, it is necessary to define what is worthy to be called a medical journal and then what form of advertisements such papers may publish without compromising the honour and dignity of the medical press. Of course, ethical principles are difficult to define and still more difficult to enforce, but the most powerful means to this end is to create a wholesome public or professional opinion, and congresses very materially help in developing such opinion. Then there is the whole question of copyright and the limit up to which quotations are justifiable. The international assimilation of medical terms is also a very practical problem which an international association of the medical press might well help to solve. Thus it will be seen that there is no lack of useful work that could be undertaken, and in any case, and whatever may be the result, the British medical press should take its fair share of the efforts made by other nations for the common good.

Paris, April 16th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

"How the Poor Die."

THIS is the heading in one of the Manchester papers to the report of an inquest held by Mr. J. F. Price, the county coroner, at Withington Workhouse on April 10th. A working cabinet-maker living in lodgings in Hulme had been ailing for some time and was occasionally intemperate. On April 1st he was taken ill at his work, and the next day a fellow lodger applied at the Chorlton Union offices, and the invalid was seen by a medical man who ordered his removal to the Withington Workhouse Hospital. About 7 P.M. he was assisted into the ambulance van which was sent for him, but on its reaching the workhouse the man was not in it. A policeman met him staggering along Burton-road and, with the usual amount of diagnostic insight possessed by his class, thought he was drunk and told him to go home. The man, however, went into a hotel and on coming out fell down, whereupon he was taken to the police-station. He was visited, so it is stated, every hour, but made no complaint of illness till next morning, when he was removed to the workhouse hospital, where he died two days later. "Medical evidence described the cause of death as consumption and pneumonia." "Death from natural causes" was the verdict of the jury, "who suggested that an attendant should always accompany persons sent in the van to the workhouse." This very proper suggestion was met by the statement that it was not the practice except in cases of lunacy; but if a patient is so ill as to require to be taken in the ambulance to the workhouse he should be looked after and cared for on the journey. It is satisfactory to find that at a meeting of the guardians on April 12th the chairman "instructed the relieving officers to either accompany patients to the workhouse or send some other person with them." This unfortunate case cannot serve as an indication or an illustration of "how the poor die." It is sad enough; but the only exception—so far as the evidence went—to the proceedings of the Poor-law authorities that can fairly be taken is the fact that the man was sent alone in the ambulance. This should not have happened and will not happen in the future. The reporter presumably yielded to the temptation of using a sensational heading, even though, happily, this exceptional case does not tell us "how the poor die."

The Mauldeth Hospital Fund.

The Mauldeth Hospital is devoted to the care of incurable cases, and in aid of its funds an exhibition of art and handicrafts is being held in the Chorlton Town Hall, Manchester. One section is given over to "works of representative artists," chiefly sent for exhibition only. Another contains specimens of art work, crafts, and curios from many lands. Some of these are on sale. A third section is for "articles representative of British art and crafts sent in for competition." "The Canterbury Weavers" send an interesting sample of work. In Canterbury an attempt has been made and, it is said, successfully, to revive the old industry of hand-loom weaving. Employment is already given "to 30 or 40 girls, many of whom were physically incapable of ordinary hard work." The exhibition was opened on April 10th and is to remain open for a month, and the proceeds are to be devoted to one special branch of the work of the hospital—the provision of small pensions. The committee of the hospital give about £400 a year in pensions of £20 "for the benefit of afflicted persons who prefer to live with their relatives." Great care is taken in the selection of these cases. The exhibition was declared open by Sir W. H. Bailey, whose address was in the main a vindication of Manchester from the charge of being wholly given up to commercialism.

Vicissitude.

Exposed for sale in the shop window of a dealer in old plate and jewellery in Manchester is a richly-chased silver salver. In the centre an inscription is engraved which reads as follows: "Presented to —— Esq., M.R.C.S., L.S.A., as a token of gratitude and esteem by the widow and children of the late ——, surgeon, —— [the name of a neighbouring town], in whose last trying illness he not only displayed the skill of the physician, but the unvarying kindness and attention of a friend.—June, 1864." Not so very many years have passed since this token of loving kindness and grateful remembrance was given and received with painful pleasure and it may now perhaps go the way of old silver, be melted down and worked up again into a similar memorial of affection.

Hospital Sunday.

The committee of the Hospital Sunday Fund for Manchester announce that the total amount collected on Feb. 10th was £4062. This is an increase of £196 over last year's collection. Hospital Saturday is fixed this year for May 4th.

Manchester Port Sanitary Authority.

At the meeting of the Manchester Corporation Ship Canal Consultative Committee held on April 17th a letter from the Local Government Board was submitted in reference to establishing a permanent port sanitary authority for Manchester. The Board recommend that the authority shall consist of four representatives from Manchester, four from Salford, one from Stretford, one from Eccles and district, one from Warrington, one from the district of Runcorn, and one from the Widnes district, the costs to be divided proportionately. A public inquiry is to be held shortly as to the desirableness of these proposals. Although a close watch is kept to guard against the importation of plague or any other infectious disease it is very desirable that all the machinery for the purpose should be carefully arranged and kept in good working order.

Manchester and Salford Co-operative Society.

The Manchester and Salford Co-operative Society is composed almost entirely of those who are called the working-classes. There are, it is said, 14,572 members, who have standing to their credit in the society the sum of £210,829. They do a large business, the sales for the last quarter having amounted to £92,382. After all charges have been made a dividend of 2*s.* 3*d.* in the pound is given on members' purchases, and of 10*d.* in the pound on those of non-members, various grants and bonuses are also given, and the following contributions to medical charities are made. To the Children's Hospital, £5 5*s.*; to the Royal Albert Asylum, £5 5*s.*; to the Manchester Royal Infirmary, £10; and to the Northern Counties Hospital for Incurables, £5 5*s.*

Dr. Metchnikoff on Microbes and the Human Body.

A special meeting of the Manchester Literary and Philosophical Society was held in the Society's Library in George-street on April 22nd, when Dr. Elie Metchnikoff of the Pasteur Institute, Paris, delivered the "Wilde" Lecture.

Before its delivery, Professor Lamb, the President of the society, presented the Wilde Medal for 1901 to Dr. Metchnikoff, and the Wilde Premium to Mr. Thomas Thorp. The subject of the lecture, which was delivered in French, was "La Flore Microcobienne du Corps Humain." There is no question as to the interesting nature of the lecture, though it might perhaps have been a little startling and disquieting to those of the audience who were not previously aware of the methods exhibited by nature in our bodily arrangements. It seems that we are born free from microbes, but immediately after birth the surface of the skin and of the mucous membranes becomes inhabited by them. In the skin the capillary follicles are their favourite abode, while the moist mucous membranes are even more abundantly supplied than the skin. But the digestive organs exhibit them in the greatest abundance. More than 30 species inhabit the mouth. Though many bacteria cannot endure an acid environment the bacterial system of the human stomach is "pretty rich," 30 different species having already been distinguished. In the small intestine bacilli are the predominating form and in the large intestine they are joined by a great number of new kinds. The latter is inhabited by about 45 species of microbes. It begins to be invaded immediately after birth, even before any food has been taken. The microbes of the skin cannot be shown to do us any special good, but the flora of the mouth may be of service. Wounds in the mouth heal sooner than do those upon the outer skin. And it is probable that the acids secreted by many bacteria in the small intestine prevent the development of certain other microbes which may impede digestion. "There was reason to believe that in some cases the germs of Asiatic cholera were rendered innocuous by the action of the microbes which they encountered in the intestines." It has been contended that microbes played an important part in digestion, but the general conclusion from the data available is that "for the normal action of the human digestion the presence of the intestinal microbe was by no means indispensable." As to the harm done by microbes, when the defensive forces of the body flag the bacteria of the skin begin to multiply and "to pour their noxious products into the tissues and the blood," so that serious boils and anthrax may occur. But the greatest harm is done in the stomach and intestines. The gravity of the danger in cases of perforation of the intestines "is due to the inflammatory action of the microbes that escape into the peritoneum." It is probable that a great many of the toxic products of our intestinal flora have still to be ascertained, but there is reason to state that they play a considerable part in causing many and various maladies. Dr. Metchnikoff then asked how we were to square the conviction that so many of the microbes usually found in the body are injurious with the Darwinian argument that if so they ought to have been eliminated by natural selection. To account for this he drew "attention to the fact that the very organs of the body which sustained this flora were themselves for the most part either useless or injurious to health and life." The capillary follicles of the skin, inhabited by microbes capable of producing more or less serious disease, "were useless organs and represented merely what was left of the hair that covered the skin of animals who were our ancestors." In the digestive apparatus of man there were parts, to say the least, now useless—e.g., the vermiform appendix—"more fully developed in our animal forefathers," and already undergoing reduction in the anthropoid apes. "Even the stomach ..... was in reality nothing but a large reservoir for food ..... which could without serious inconvenience be dispensed with. There were at that moment four persons living without stomachs and thus furnishing a strong argument against the utility of that organ." Dr. Metchnikoff allowed that the small intestine was necessary, but that instead of being between 18 and 21 feet long man might do with one-third of that length. Still more disrespectful was his attitude towards the large intestine. "The sum of all this was that we possessed a voluminous and highly-developed organ which fulfilled no useful function and bred a very copious and varied mass of microbes capable of injuring us through their poisons." Its development was traced to certain conditions in the life of herbivorous vertebrate animals capable of running at great speed, conditions no longer present, and so not requiring that special organisation. "The slow tendency of evolution to bring about the atrophy of such organs or characteristics might, however, be assisted by medicine and surgery, medicine coping more effectually with the noxious microbes and their effects, while the progress of surgery had already brought it within its power to remove by operation organs or parts of organs propitious to the growth of the 'flora.'" Dr. Schunck proposed and Professor Hickson seconded a vote of thanks to the lecturer which was accorded with acclamation.

April 23rd.

WALES AND WESTERN COUNTIES.

(FROM OUR OWN CORRESPONDENTS.)

Cardiff Infirmary.

ALTHOUGH, thanks to the energy and public spirit of the Mayor of Cardiff and of the proprietors of the *Western Mail* this institution is for the time cleared of its debt of £10,000, it is still unable to pay its way. With an expenditure of £2000 a year in excess of their income it was hardly likely that the Management Committee could entertain at their meeting on April 10th a proposal to open a disused ward of 15 beds, although the urgent necessity for the carrying out of the proposal was evident from the fact that no fewer than 143 patients were awaiting admission and some, it is said, had been waiting nearly nine months. The new operating theatre is to be opened on June 6th by Mr. Edmund Owen. The donor of this much-needed addition, which will cost about £1500, is Mr. Thomas Webb of the Ocean Colliery Company.

Vaccination in Cardiff.

Cardiff has hitherto been looked upon as a well-vaccinated town, but the inspections and investigations consequent upon the recent slight outbreak of small-pox have revealed conditions anything but satisfactory. In a report to the Health Committee at the end of March Dr. Edward Walford stated that in the street in which the first cases of small-pox occurred he found per 11 cent. of the children unvaccinated. On April 11th the subject was discussed by the Vaccination Committee of the Cardiff Board of Guardians, when it was reported that a Leicestershire railway contractor was carrying out extensive works in the town, that a large number of his workmen came from that county, and that it was their children in great measure who were unvaccinated. The chairman of the committee appeared to resent the interference of the Jenner Society from whom a communication had been received suggesting the purchase of the society's publications for distribution in the town. The committee considered that they were quite alive to their responsibilities and were doing all they could to enforce the Vaccination Act in spite of the fact that their attention was first drawn to the large number of unvaccinated children not by their own officers but by the medical officer of health.

The Medical Officer of Health of Newport.

The Local Government Act of 1888 required that every medical officer of health appointed after Jan. 1st, 1892, to an urban or rural district having a population exceeding 50,000 should possess special qualifications for the office, and it was confidently expected by those who took to public health work as a special line of practice that the Local Government Board would insist upon adequate remuneration being given at least to those who devoted their whole time to their duties. That this expectation was not to be realised was only too apparent in numerous instances where the Board sanctioned appointments at salaries even below those paid to the chief inspectors of nuisances in some large towns. Lately, however, the Board have taken a firmer stand and have apparently decided that the minimum salary of a whole-time medical officer of health shall be £500 per annum and that where a contribution is made from the Exchequer grants an officer who is paid a smaller sum than this shall not be debarred from practising privately or from holding some other office. The Corporation of Newport—or, more strictly speaking, a small section of that body—have been endeavouring for the past six months to persuade the Board to sanction the renewal of the appointment of Dr. J. Howard-Jones at a salary of £400 as medical officer of health and of £50 as port medical officer. As the Board were proof against all persuasion the town council, at their meeting on April 9th, accepted the inevitable and reappointed Dr. Howard-Jones at an increased salary of £50 per annum as port medical officer. When it is remembered that Newport is an extensive port and has a population exceeding 70,000 persons, and that

the medical officer of health also acts as police surgeon, a salary of £500 does not seem an exorbitant one and such indeed was the opinion expressed by the chairman of the Health Committee, who spoke in the highest terms of the capabilities of Dr. Howard-Jones and of the excellent work which he had accomplished during his six years of office.

Inefficient Vaccination.

At the meeting of the Bridgend Board of Guardians on April 13th it was decided to urge upon the Local Government Board the desirability of insisting that private practitioners should vaccinate as completely as public vaccinators are required to do. The opinion was expressed that children were sometimes insufficiently vaccinated by the private practitioner.

The Sale of Unsound Meat.

A case of some importance on appeal from a conviction by the Aberavon justices was heard at the Glamorgan Court of Quarter Sessions at Cardiff on April 13th. The borough of Neath and the urban district of Margam adjoin and almost form one town. In December last a butcher killed a pig in his slaughter-house in Neath and a farmer who had previously purchased it took the carcass to his own premises situated in Margam. The carcass was found to be unfit for human food, was condemned by the medical officer of health of Margam, and was ordered by a justice to be destroyed. At the instance of the Margam District Council the butcher was proceeded against before the county justices and he was fined £5. He appealed against this decision and at the quarter sessions his counsel contended that the proceedings ought to have been taken, not by the Margam District Council, but by the Corporation of Neath, in whose district the sale took place. The court held the contention to be a sound one and allowed the appeal, but consented, upon the application of counsel for the Margam sanitary authority, to state a case for the High Court.

Bequests to Charities.

Miss Selina Northcote of Woodbury has bequeathed £3000 to the Devon and Exeter Hospital, and £500 each to the West of England Eye Infirmary, Exeter, the Exeter Dispensary, and the West of England Asylum for Idiots.—Miss Mary Cannington, who died on March 30th, has bequeathed £5000 to the Bristol General Hospital, and £500 each to the Bristol Dispensary and the Bristol Eye Hospital. A few years ago Miss Cannington gave to the Bristol Royal Infirmary £10,000.

Hospital Sunday Fund in Bristol.

At a meeting of the council of this fund held on April 18th under the presidency of the Lord Mayor of Bristol, it was stated that the total collections for 1901 amounted to £1761, being an increase of £378 over the previous year. Collections were made in 246 places of worship, as compared with 223 last year. The total distribution to the medical charities amounted to £1713, as compared with £1313 in 1900.

April 22nd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Small-pox in Glasgow.

THE movement of the epidemic continues to justify the favourable anticipations recently expressed by the authorities. The cases in hospital now number only 155 and the new admissions during the week have been fewer than for several months. At a recent meeting of the town council a member proposed that the daily bulletin should now be discontinued. The Lord Provost, in replying, referred to the unfortunate experience which followed this step when it was adopted in the earlier part of the year. At that time the epidemic developed a more active phase and a general feeling arose among the public that the authorities were concealing the real position of matters. The advantage of continuing the daily announcement just now is obvious. It offers the most practical and substantial proof that the disease is rapidly declining and that the measures adopted by the health department are proving efficient. The Lord Provost has appealed to the press to avoid the presentation in anything like a sensational form of the facts of the epidemic. Unfortunate and painful as some of these have been it is only fair to remember that the disease has been present in the city for many months and that the total number of cases and the deaths due to the disease have been spread over a relatively prolonged period. It is no exaggeration to say that in many other places the outbreak has caused more excitement than it has actually produced in the city where it has occurred. This is largely due to the fact that the totals have often been presented without any intimation of the length of time over which the numbers have been spread.

The Inspection of Meat in Glasgow.

The report of the Health Committee dealing with this subject was discussed at a meeting of the corporation on April 15th and led to a somewhat acute difference of opinion. The report proposed that in addition to the detective system at present in operation by-laws should be made for the inspection of carcasses, &c., sent into the city, by veterinary and lay inspectors, for the marking of meat passed by the inspectors, and for the arrangement and regulation of premises in which the official inspections could be conducted. It was argued that under the existing system it was easily possible to smuggle food into the city, and that the present staff could not ensure adequate and efficient inspection. Against the new proposals it was urged that they would promote the sending of portions of carcasses without any history attached, would encourage the view that suitability for food purposes could be determined by inspection of the dressed carcass rather than by a knowledge of the processes of disease, and would vitiate the principle that a wholly satisfactory examination of meat can only be made at the time of slaughter. Rather than to endeavour to add to existing local powers as was proposed, the right proceeding, it was claimed, was to move in the direction of securing an imperial law rendering it necessary for every carcass to be examined and certified at the time of killing. After an interesting debate the new proposals were adopted by a considerable majority.

Glasgow Hospitals.

It is announced that the King has been pleased, by warrant under His Majesty's royal sign manual, to direct letters patent to be passed granting a supplementary charter to the Glasgow Royal Infirmary. Mr. Thomas Jenkins has presented to the Samaritan Hospital for Women about 120 volumes of standard works on gynæcology and several cases of surgical instruments which were the property of his late son, Dr. Thomas Jenkins. Dr. Jenkins was gynæcologist to the dispensary of the Victoria Infirmary and his recent sad death at the outset of a career full of promise caused deep and widespread regret.

Medical Practitioners and Unqualified (Pharmaceutical) Assistants.

The report of the committee appointed some weeks ago at a meeting of practitioners held in connexion with a recent prosecution of a medical man before the General Medical Council was presented to a second meeting held in Glasgow on April 17th. It recommends the presentation to the Council of a memorial praying the Council to reconsider the matter and in any case not to lay down any general doctrine to the effect that the employment by a registered medical practitioner of an unqualified person to sell drugs and poisons is "infamous conduct in a professional respect." The memorial was adopted by the meeting and a deputation of eight practitioners was appointed to present it to the General Medical Council.[1]

April 24th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal College of Surgeons in Ireland.

AT a meeting of the President, Vice-President, and Council of the Royal College of Surgeons in Ireland held on April 18th Mr. F. Conway Dwyer, M.D. Dub., F.R.C.S. Irel., was elected Professor of Surgery.

Death of Dr. William Moore.

I regret to announce the death on April 18th of Dr. William Moore, ex-President of the Royal College of Physicians of

[1] Further particulars with regard to the memorial will be found on p. 1228 of our present issue.—ED. L.

Ireland, and late Crown Representative of Ireland upon the General Medical Council.

The Opening of the New Richmond Surgical Hospital.

The medical event of the week in Dublin was the formal opening by his Excellency the Lord Lieutenant of the new Richmond Surgical Hospital on April 20th. His Excellency, in declaring the handsome building in North Brunswick-street open, congratulated the governors on possessing a magnificent hospital, which had before it a prospect of a long and useful career. Addresses were also delivered by the chairman (the Right Hon. T. A. Dickson, P.C.), Lord Iveagh (whose hospital corps in South Africa was manned by the staff of the Richmond Hospital), Viscount Powerscourt, Sir William Thomson, Sir William Findlater, Sir Thornley Stoker, and Mr. Thomas Myles (President of the Royal College of Surgeons in Ireland).

The Sanitary Condition of Howth.

At a meeting of the North Dublin Rural District Council held on April 17th the clerk submitted a report made by the medical inspector of the Local Government Board on the sanitary condition of Howth. The inspector stated that the outbreaks of diphtheria drew special attention to the need that existed at Howth for a properly devised system of sewerage and drainage. As regards the public drinking water-supply the report stated that the supply of drinking-water was derived from public pump wells (about 10), the majority of which were surface wells. There were one or two open surface wells, which were very liable to pollution. In the very centre of the town, in the main street, there was an open or dipping well immediately adjoining dwelling-houses, which was extremely liable to pollution. This well should be closed, or measures taken to protect it and to convert it into a covered pump well.

Queen's College, Belfast.

On April 17th an important public meeting for the purpose of inaugurating a scheme for the better equipment of Queen's College, Belfast, was held in the Students' Union of the College. Interesting speeches were delivered and it was announced that Sir James Musgrave, Bart., D.L., would contribute £5000 to be devoted to the foundation of a chair of pathology. The Right Hon. W. J. Pirrie, D.L., has promised to provide a new laboratory of natural philosophy and engineering. The Lord Mayor (Sir Daniel Dixon, D.L.) has decided to provide an athletic field for the students. Mr. John M'Connell, J.P., has given £1000 to be used in the direction of establishing a faculty of commerce, or, failing this, for the establishment of evening classes. Some of the members of the medical faculty have promised a sum of £1000. The High Sheriff of Belfast (Mr. Otto Jaaffe, J.P.) has contributed £500, his Honour Judge Barkley £200, and two other friends £25 each. At the present time Belfast is entirely a Government college, but this interesting movement has emphasised the fact that it would greatly strengthen it and ensure public confidence if it had a board of governors or senate with local representative men on it. Being a Government college, as one of the local Belfast newspapers points out, its "government is narrow, antiquated, and totally at variance with modern views and practice." It has also been urged that the connexion of the college with Dublin Castle should be severed and that a new charter should be issued constituting it a self-governing institution on the representative principle. A committee with secretaries and treasurers has been appointed with the object of raising this new endowment fund for Queen's College. It is to be hoped that the scheme will be successful, though many true friends of the college regard the present time as inopportune, and think that it would have been wiser to have postponed the appeal until some indication was forthcoming as to the recommendations of the Royal Commission.

Irish University Education.

The proceedings of the last week have produced another example of the "topsy-turvy" condition of this most difficult of all Irish questions. In connexion with the projected new scheme for the better equipment of Queen's College, Belfast, there has been so much writing and discussion in Belfast as to the authorities of that college being in favour of sectarian universities that the President, to allay public feeling, had to make a very clear statement at the college meeting that neither he nor the college professors wished to turn it into a sectarian place of education in any form or degree. But matters did not end even with this statement, for at a meeting of the Belfast Conservative Association the Marquis of Londonderry (the President) declared that he "considered the establishment or the creation of a Roman Catholic university for Ireland absolutely unnecessary. He believed that it would be absolutely unworkable, and he considered that it would be unfair to the Protestant population of the country to ask them to contribute to maintain a university over which they had no control." These are rather remarkable statements coming from the Postmaster-General who is a member of the same Cabinet in which are Mr. Arthur Balfour and Lord Cadogan, who have both specially pleaded for the establishment of a Roman Catholic university. Lord Londonderry had to make this very strong declaration, it is said, because it was brought home to him that his party in Ulster looked with the gravest suspicion on the appointment of the coming Commission in reference to Irish university education. During his recent holiday in Ulster the Postmaster-General has been most carefully eliciting the views of educationalists and others on the university question, and hence his speech is all the more remarkable. It shows clearly that even in the present Cabinet there are men who differ as widely on this vexed question as do people living in Ireland itself. Then, again, the debate in the House of Commons on April 22nd showed that even the Roman Catholics of Ireland are not quite agreed as to the Commission, for Mr. Dillon stated (and Mr. J. Redmond agreed with him) that the Nationalist party had no responsibility for the issue of the Commission. "We did not ask for it, and we were not consulted about it, nor, as far as any intimation reached me, did the Irish hierarchy ask for it, and I feel confident that the hierarchy of Ireland would not make themselves responsible for the referring of this question to a Commission without consulting with the Irish Party." In the debate which followed a good deal was said as to whether Trinity College should be included in the matters to be considered by the Commission. Originally the Lord Lieutenant said that Trinity College was to be excluded from the subjects referred to the Commission for consideration, but the Presbyterians of Ireland have demanded that Trinity College and the University of Dublin should be included, and it is evident from Mr. Dillon's speech that the Nationalist party are of the same opinion. Such a pass have things reached that the authorities of Trinity College have become most uneasy and Junior Fellows have urged in a memorial to the governing body of Trinity College the desirability of intimating to the heads of the Roman Catholic Church and of the Presbyterian Church in Ireland their readiness to provide facilities for the catechetical and religious instruction of their students by clergymen of their own churches and to invite their coöperation. They also urge that negotiations should be entered into with the heads of the Presbyterian Church with the view to establish a Presbyterian Divinity School in Trinity. The governing body made a very non-committal diplomatic reply. If the Royal Commission will only bring out clearly the facts apart from all sentiment or religious and sectarian bias, it may do something to lead to the settlement of this most vexed and perplexing of subjects.

April 24th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

A Central Office for the Recovery of Medical Fees.

THE Association of Medical Men of the Seine, looking at the difficulties which so often arise with regard to medical men obtaining regular payment of their fees, have decided to start a central office, to which their clients will send their bills. This office will undertake to collect the money and will charge a commission of 5 per cent. with a minimum of 50 centimes for expenses. Disputed accounts will be looked after by a separate department, which will undertake all charges and expenses, charging merely a commission of from 20 to 30 per cent. on the sum gathered in however little or much this may be. The office will also keep a "black list" of persons who are known to be bad payers which medical men may consult, so that they will be put on their guard. Everyone making use of this office will have to subscribe an annual sum of 10 francs.

so that the working of the office may be upon a sound financial footing. It is not proposed to open the office until at least 300 persons are entered as subscribers. This is not the first establishment of the kind which has been tried, but the former ones were due to private enterprise and failed. It is to be hoped that the present attempt, which is undertaken with the official auspices of the medical association, will be a real success.

The Principles of Medical Deontology.

On April 5th it was announced that the Conseil Général des Sociétés d'Arrondissement had adopted the following principles of medical deontology. 1. Any medical man who is called in to attend a family for the first time shall, if he sees or becomes aware that he has merely been called in in the absence of the usual medical attendant, only give advice and treatment for so long as his professional brother is away. 2. Any medical man called in in the absence of another medical man who has been treating the case, may, if the patient expresses a wish to retain his services for the future, go on with the case provided that he informs the former medical attendant. 3. Any medical man who may be accidentally called in an emergency to a patient shall confine himself to prescribing such medicines and treatment as are immediately necessary and shall not return to the patient's house except in consultation with the usual medical attendant. 4. Any medical man summoned by a patient during the course of an illness, either acute or chronic, shall do his best to get the medical man hitherto in charge of the case retained. In case of failure the new attendant must at once acquaint the old one whom he succeeds. 5. Any practitioner called in as a consultant shall, while in presence of the patient or his friends, abstain from all comment on the treatment hitherto followed. The consultation should be held in private and the treatment recommended should be carried out by the ordinary medical attendant. 6. Any consultant, whether called in the first place by the medical man or by his patient, shall not pay a second visit without the cognisance of the general practitioner. 7. It is a mark of good fellowship to accept as a consultant the practitioner proposed by the patient or his family, whatever be his age or status, provided that his personal and professional honour are above suspicion. 8. A consulting-room is neutral ground, where a medical man may give advice to anyone coming to consult him without any regard to the medical man who usually looks after the patient in question.

Hygiene and Laundries.

At the meeting of the Academy of Medicine which was held on April 16th M. Delorme, surgeon-general (*médecin principale*) in the army and one of the professors at Val de Grâce, said that in his opinion laundry operations as at present practised did not afford sufficient protection to those people who feared the importation of microbes into their houses by reason of their own personal linen having been in contact with that of their neighbours who might very possibly be suffering from small-pox or other infectious disease. M. Delorme considered these fears as perfectly reasonable and wished that all directors of hospitals, asylums, and refuges should be made aware of them. Washing, as at present practised, includes soaking in cold water, soaking in lye, soaping, beating and brushing, rinsing and hand-wringing, or nowadays machine-wringing, drying, ironing, and folding. All these processes employ numerous hands and brutal machinery which destroys the linen, to say nothing of chemicals such as *eau de javelle*, sulphur, and the like, which are none the less destructive. M. Delorme forgot, however, that all these substances are for the most part strongly antiseptic and that a prolonged soaking in a boiling solution of soda deprives microbes of most of their powers for evil. The process which M. Delorme put forward and which the Assistance Publique has just adopted at the hospital in the Rue Michel-Bizot, and which is employed also at the Pasteur Hospital, is very simple. The linen is first soaked in a hot solution of bicarbonate of soda. It then passes into a large cylindrical stove which can be rotated in alternate directions. The axis of this stove is formed of a second hollow cylinder pierced with holes which allow the introduction of: (1) cold water, which washes out the soda solution; (2) steam under pressure, which converts the cylinder into a veritable disinfecting stove of a very perfect kind, for the oscillatory movements result in a thorough cleansing of a type not to be found in ordinary disinfecting stoves; (3) a hot solution of soap which, as the apparatus is kept in motion, effects a thorough cleansing; and (4) another current of cold water after half an hour or so, followed by more steam and lastly by a final rinsing current of cold water. The linen is then passed through a wringer and finally dried in a current of hot air. M. Delorme considers that this system provides for ideal washing and disinfection at the same time. Experiments made at the Pasteur Institute show that linen infected with all kinds of virulent microbes came out at the end of the operations perfectly aseptic. Only two persons are required to work the machine, which, besides being economical in working, takes up very little space. An ordinary cellar, provided that access for the clothes and a plentiful water-supply are provided for, will serve for the washing of the linen from a hospital of 500 beds. At the children's hospital in the Rue Michel-Bizot an ordinary mason with one assistant looks after the washing. The saving effected in one year at a charitable institution at Nanterre where 2500 kilogrammes of linen were washed every day was over 28,000 francs at the end of the first year. M. Delorme suggested that the Academy should recommend this apparatus for use in both civil and military hospitals as well as in private laundries.

April 23rd.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Battle of the Clubs in Leipsic.

STRIKES of medical officers of clubs have already taken place in several towns in Germany, such as Remscheid and Iserlohn, but none of them were so important as that which is now in progress in Leipsic. The club system existing in Germany has been several times described in THE LANCET,[1] and it will be recollected that membership of a club is compulsory on the working class, that the clubs are all under State control, and that the income of a considerable proportion of the medical profession depends on club practice. The committees of clubs have often taken advantage of their position to appoint medical officers on terms hardly compatible with their position as professional men, but in Leipsic, where matters recently came to a climax, the conditions of club practice have hitherto been relatively satisfactory. The Leipsic sick club had adopted the so-called "free choice system," and had admitted nearly 200 medical men to practise in the club. The medical officers of the club always had a union of their own and a representative committee which was in communication with the executive of the club and assisted in settling disputes arising between medical men and club members. Of late the relations between the executive of the club and the medical committee became rather strained, the former alleging that the medical men did not sufficiently consider the financial interests of the club in their prescriptions, &c., and that the medical committee had not instructed the medical officers as to their duties in this respect. The executive of the club, moreover, declared that they would no longer recognise the medical committee, but would in future issue instructions to the individual medical men without its intervention. This they in fact did, and several medical officers were asked to call at the business premises of the club where they were discourteously reprimanded. The medical officers, therefore, gave notice that if matters were not put on a satisfactory footing within a week they would then cease to work for the club, and 156 of them—the overwhelming majority—accordingly took this course on April 5th. In thus breaking off their club practice they did not thereby leave the club patients without medical advice, but consented to attend them as private patients, charging fees to the individual cases. The club then proposed to invite medical men from other towns to settle in Leipsic, where they would be appointed medical officers to the club, the free choice system being thereby abandoned. The Leipsic medical chamber, however, informed aspirants to the vacancies that they would be required to appear before the court of honour if they agreed to the conditions offered by the club. The whole medical profession is on the side of their brethren at Leipsic. The Berlin Free Choice Society has issued a notice to its members informing them that they will not be re-admitted

[1] THE LANCET, Oct. 22nd, 1898, p. 1093; June 17th, 1899, p. 1668; and Nov. 10th, 1900, p. 1390.

to the society if they go to Leipsic at the present time to aid the club in its conflict with the medical men. The *Medical Reform* says that possibly some medical men with little money and less character might be tempted to come to terms with the club, but that such persons must be pitied rather than blamed for their ethical shortcomings. The state of affairs at Leipsic has caused a sensation not only in the medical profession but in all circles of society. The daily newspapers are publishing detailed telegrams descriptive of the strike and the measures taken on both sides, and their columns are filled with discussions on the disadvantages of medical practice in general and on the unattractive features of club practice. Journals of every political bias, even those written for the working classes, are unanimous in blaming the club and in congratulating the medical officers on the firmness of their attitude. This is the first medical strike begun not for financial but for ethical reasons, and is on a greater scale than the previous strikes, which were nearly all unsuccessful owing to want of organisation. Attempts at mediation have been tried at Leipsic, but have proved useless, and it is to be hoped that the club will be defeated.

Organisation of the Pharmaceutical Profession.

The *Official Gazette* recently published a Royal order relative to the new organisation of the pharmaceutical profession in Prussia, which will be conducted on lines analogous to those followed several years ago in the organisation of the medical profession. A pharmaceutical chamber will be instituted for every province with power to discuss questions concerning the profession, and if the necessity arise it will be consulted by the provincial authorities. The members of the chambers are to be elected by the qualified pharmaceutical chemists residing within the district, so that each 40 electors shall choose one representative. Courts of honour will not be instituted at present, but if a member commits an ethical misdemeanour the chamber will be authorised to deprive him of the right of electing or being elected. Apart from the provincial chambers a joint committee will be instituted for the whole State, to which each provincial chamber will send one representative.

Income of the Medical Profession in Berlin.

The Medical Chamber of Berlin and the province of Brandenburg has issued an interesting report on the subject of the income of the medical profession residing in that district. The chamber is authorised to fix an annual sum to be paid by every medical man for the expenses of the chamber and the support of distressed members of the profession. It had been decided that a uniform rate of 10 marks (10*s.*) should be paid and an additional sum by those earning more than 5000 marks (£250). The chamber has been informed by the income-tax officials that of 1946 Berlin medical men under the jurisdiction of the chamber 529 earned from 900 to 3000 marks (from £45 to £150), 273 from 3000 to 5000 marks (from £150 to £250), and 785 more than 5000 marks, the largest income amounting to 295,000 marks (£14,750). It appeared that 107 medical men had no taxable income at all and the income of 252 could not as yet be ascertained. In the other towns of the province the proportions were similar to those found in Berlin, so that 4 per cent. of all the medical men had no taxable income, 26 per cent. had an income from 900 to 3000 marks, 17 per cent. from 3000 to 5000 marks, and 40 per cent. more than 5000 marks. In 13 per cent. no reliable information could be obtained.

April 22nd.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Professor Bizzozero's Successor.

THE medical faculty of the University of Turin has unanimously resolved to invite Dr. Camillo Golgi, LL.D. Cantab., professor of general pathology in the University of Pavia, to fill the chair left vacant by the death of their colleague, Dr. Bizzozero. Dr. Golgi's great work in histology, his classical studies in malaria, and his reputation as Dr. Bizzozero's most distinguished pupil, were recommendations not easily found united in possible candidates for the chair.

A Case of "Siamese Twins."

Dr. Francesco Caruso, *privat-docent* in gynæcology in the Neapolitan School, has just reported on a case of monstrosity resembling that of the Siamese Twins. It comes under the category of "sternopagi"—that is, of two infants joined face to face from the upper part of the thorax to the umbilicus, this latter being common to the two. They are both of the female sex, in fair health, and take the breast freely from the mother, a peasant woman of Marianella. If, as is not unlikely, they should live, Dr. Caruso and other consultants deprecate surgical intervention, as contra-indicated by the disposition of the thoracic organs.

A Great Medical Philanthropist.

"Having made Italy, we have now to make Italians," said Cavour's successor, Massimo D'Azeglio, and to carry out this consummation, so "devoutly to be wished," Dr. Pietro Panseri devoted all his faculties, original and acquired. He "began at the beginning," and after graduation at the University of Pavia, made the rescue and rehabilitation of mal-formed and mal-organised children his professional *métier*. For well-nigh 30 years he laboured among the poor of Milan, bringing under special treatment every infantile victim to faulty or feeble development, and earned a truly wonderful reward in rearing thousands of apparently hopeless cases to the normal stature and strength, physical and mental, of their more fortunate fellows. Milan was the headquarters of his practical work and there he brought the "Istituto dei Rachitici," founded by a kindred spirit, Pini, to its present high state of efficiency. At Bologna he was *privat-docent* in "Orthomorphein," as it is called in Italy, and initiated successive relays of workers in the *métier* he had made his own. Whatever energy he could spare from his special task he dedicated to promoting the interests of the profession and the cause of public hygiene, acting as communal assessor and councillor mainly with this object. A native of Sormanno, in the province of Como, he was but 52 years of age when he died, leaving behind him a noble record of philanthropic work inspired by true patriotism and directed by rare professional skill.

April 21st.

CANADA.

(FROM OUR OWN CORRESPONDENT.)

McGill University.

MCGILL UNIVERSITY has in the past received most liberal support from the generous citizens of Montreal, and the end apparently is not yet. Sir William Macdonald, who has already contributed $2,500,000 to the funds of the institution, has again announced that he will further subscribe to the extent of $150,000. Of this amount $75,000 will go to endow the chair of Chemistry, $62,500 for the chair of Botany, and $12,500 will be added to the chair of Physics. By reason of these gifts there will be released the sum of $150,000 which has in the past been used for these endowments, and this will be taken and applied to the improvement of the arts course. Miss Jessie Dow has also contributed $60,000 for the chair of Political Economy. Lady Strathcona and the Hon. Mrs. Howard will bear the expense of a new wing to the medical building which will be erected during the course of the coming summer. It will be four storeys in height and will be supplied with lecture theatres, museums, and chemical laboratories.

Cremation in Quebec.

Some little time ago Sir William Macdonald of Montreal offered to defray the cost of the erection of a crematorium in the Mount Royal Cemetery of that city. For this purpose it was found necessary to have legislative authority. A measure for this purpose was therefore introduced into the Quebec Legislature during the session which has just closed, and after considerable opposition it finally passed that House by a majority of one and the Legislative Council of the province by a vote of eleven to seven, the opposition coming chiefly from the Roman Catholics. The Bill provides "that the deceased at the time of his death is entitled to be buried in Mount Royal Cemetery, and has expressed by his will a wish that his body be cremated."

Toronto University.

A measure of relief has been introduced by the Government into the Legislature of Ontario for Toronto University, the senate of which by a very large majority now favours a change of name to the "University of Ontario," pointing out

that it is the only State-aided university in North America which takes its name from the city in which it is located. For the past three or four years Toronto University has been financially embarrassed, and has practically gone behind in that time to the extent of $30,000 or $40,000. The governmental relief will give the university $20,000 this year; and in the supplementary estimates there is provision for $50,000 more to commence the immediate erection of a new science building, the total cost of which will be about $200,000. The Bill further provides that the government of the university shall be invested in a board of trustees. This change is made to tempt wealthy Torontonians who in the past have taken no financial interest in the affairs of the university. McGill University, which is not under State control, prospers wonderfully by the acts of wealthy Montrealers; and by placing Toronto University under the management of a board of trustees it is thought that the moneyed men of Toronto will not hesitate in coming to its assistance.

Hospital Work off Labrador.

Dr. W. T. Grenfell, who for the last 11 years has been superintending missionary work among the fisher-folk in Labrador, recently addressed a meeting in Montreal where he gave some interesting details of hospital work in that country. In Labrador there are three hospitals, one at Battle Harbour, another at Indian Harbour, and a third now under course of construction at St. Anthony on the North French Shore. In addition to these there is the hospital ship *Strathcona*, of which the medical officer is captain, which is equipped with six beds and all necessary appliances, including x-ray apparatus. This ship constantly cruises up and down the coast and last year handled 1020 cases. Dr. Grenfell expressed his gratitude to Dr. T. G. Roddick, M.P., who had given great assistance in the work.

A Consumption Sanatorium for Nova Scotia.

Nova Scotia will soon have a consumption sanatorium. About a year ago a committee was appointed by the Government of the province to report on the question of a site, the style of building, management, &c., and this committee have had their report laid before the Legislature by the Premier of the province, the Hon. Mr. Murray. The committee recommend that the location be either at Dutch Village, on the Atlantic seaboard, near Halifax, or on the shore of Bedford Basin, near the village of Bedford; that accommodation be provided for 20 patients; that no resident medical officer be appointed, but a trained female nurse as lady superintendent; and that regular specified visits be made by two qualified medical men every week. Dr. Reid, the secretary of the Nova Scotia Board of Health, disapproves of the site near Halifax. He is further of the opinion that better results are obtained where a medical man is in residence as superintendent.

Winnipeg General Hospital.

The board of governors of the Winnipeg General Hospital held their annual meeting on Feb. 28th. The annual report showed that the number of patients treated in this institution during the past year numbered 2649, and that in the out-door departments there were 1435 consultations. The financial report showed a deficit of $4510.50, which was due to the fact that the hospital had had to cope with a small-pox outbreak within its walls during the early part of the year.

Proposed Dominion Medical Council.

Dr. T. G. Roddick, M.P., has introduced his Bill for a Medical Council for the whole Dominion of Canada. It provides that each province (of which there are seven) and the North-West Territories shall have each three members on this board—in all 24 from the regular profession of medicine. As there are some homœopaths in the province of Ontario who have representation on the Ontario Medical Council these will also be allowed three members on the Dominion Board to be elected by themselves. The 24 members of the regular school will be appointed as follows: the president of each provincial medical council *ex-officio*, one member to be elected from the medical councils of each province, and one to be appointed by the Governor-General in Council from each province, and for all such purposes the North-West Territories are considered as a province. In his address before the House Dr. Roddick gave the medical population as follows for the Dominion of Canada: Ontario, 2500 practitioners; Quebec, 1400; Nova Scotia, 476; New Brunswick, 243; Prince Edward Island, 90; Manitoba, 344; British Columbia, 214; and North-West Territories, 95. If this Bill becomes law it will be necessary for each of the provincial legislatures to enact a short amendment to their medical acts.

Canadian Medical Men in the Imperial Services.

A very gratifying announcement has just been made by the Canadian Militia Department to the effect that there is at present a Bill before the Imperial Parliament which will provide for the admission of the medical men of the colonies to the Imperial naval, military, and civil services. It is understood that the measure in question will provide that where the examinations and courses of study at the principal colonial schools of medicine are the same or equivalent to those of the schools of the United Kingdom the candidates shall be admissible to either of these services. At the time the Canadian contingents were being despatched to South Africa surgeons of the highest standing in Canada and holding commissions from Her late Majesty in the militia volunteered for service there, and even a complete field hospital was offered by Canada, but in both cases the War Office was forced to refuse such service because it was contrary to the British Medical Act of 1858. Through the passage of this Bill this disqualification will be removed, and there is no doubt that Canadians as well as other colonial surgeons will hail the adoption of such legislation with complete satisfaction.

Vital Statistics from Quebec.

The sixth annual report of the Board of Health of the Province of Quebec contains some interesting details. In some respects that province is in advance of the other provinces of the Dominion, particularly as regards its birth-rate and the prevention of tuberculosis. Every householder now, in the province of Quebec, in whose household there occurs a death from consumption must notify the secretary of the local board of health within 48 hours of the date of such death, and then upon such notification having been given the municipality is bound to cause the disinfection of the apartments which have been contaminated by the patient. This law came into effect on June 7th, 1900. The recorder of statistics for that province has given some figures concerning the death-rate from tuberculosis in some of the Canadian cities, and it would appear that Quebec city is the least affected and Ottawa, the capital, the most. The death-rate in Quebec city from tuberculosis is 1·99 per 1000 of the population; that of Ottawa is 3·12, of Montreal 2·87, of Kingston 2·17, of Toronto 2·41, and of London 2·67. These figures compare favourably with Paris at 4·90 and New York city at 3·60. The birth-rate of Quebec province was 35·7 per 1000 in 1898 and 33·4 per 1000 in 1899.

The Metric System.

Lieutenant-Colonel Burland, Montreal, is interesting himself in the formation of a metric association the object of which is to prepare the people of Canada for the adoption of the metric system. The Hon. Mr. Bernier has accepted the honorary presidency. The association will seek to continue in a more extended way the work which has already been begun by the Canadian Government.

Toronto, April 4th.

NEW YORK.

(FROM OUR OWN CORRESPONDENTS.)

Yellow Fever and Mosquitoes.

AT the recent Pan-American Medical Congress held in Havana, Cuba, a committee reported a final statement of the results of their investigation made at the experimental sanitary station (Camp Lazear) near the town of Quemados, Cuba. At this station, under strict quarantine and with all other sources of infection absolutely excluded, they succeeded in infecting 85·7 per cent. of those individuals who had been bitten by purposely contaminated mosquitoes (culex fascinatus). Their observations did not confirm the opinion that mosquitoes carried the specific agents in their probosces and simply transferred it from one individual to another in a mechanical way, but appeared to demonstrate that the parasite of this disease must undergo a distinct cycle of development in the body of the mosquito before the latter was capable of conveying the infection. This period would seem to be not less than 12 days. They also considered the question of house infection and were able to show that this infection was due to the presence of mosquitoes that had previously bitten

cases of yellow fever, and that the danger of contracting this disease might be avoided in the cases of non-immune individuals who slept in this building by the use of a wire screen. They also demonstrated by observations made at this camp that clothing and bedding contaminated by contact with cases of yellow fever and by the excreta of these patients were absolutely without effect in conveying this disease. They concluded that yellow fever was only propagated by the bite of the mosquito (culex) and that the disinfection of articles of clothing and bedding soiled by the excreta in this disease was no more required than in the case of like articles soiled by a patient with an attack of malarial fever.

The late Dr. Pepper of Philadelphia.

The late Dr. Pepper of Philadelphia was not only a scientific man of high attainments but a philanthropist of lofty ideals. Mr. Francis Norton Thorpe, writing in the *Century* magazine for February, 1901, says of him: "Dr. Pepper was the son of a physician, the celebrated 'Elder Pepper' as he is called to distinguish father from son. The father pursued advanced medical studies together with Oliver Wendell Holmes in Paris at a time when American students rarely went abroad. On his return to Philadelphia he became professor of the theory and practice of medicine in the University of Pennsylvania, acquired an extensive practice, and died in 1864 at the early age of 56 years. A few months before the father's death the son was graduated in medicine at the University of Pennsylvania. Great physicians are rare, and rarer is the man who is at the same time equally great as a man of affairs, as educator, and public benefactor. Such a man the son became. In 1870, at the age of 27, he projected the University Hospital and boldly set out to raise an endowment fund of $750,000. In less than four years he secured more than $500,000 (£100,000), including two appropriations of $100,000 (£20,000) each from the Legislature. The hospital was formally opened in 1874. Its creation was necessitated by the removal of the university from its old site, where the Post Office now stands. No such task had been done before by a citizen of Philadelphia, and its performance gave Dr. Pepper a position among the first men of the city. Dr. Pepper raised above $10,000,000 (£2,000,000) and secured about 100 acres of land from the municipality, lying near the heart of Philadelphia. To the execution of this task he gave the services of one of the most acute and at the same time most practical minds ever vouchsafed to man. To this service of his genius he added the personal gift of nearly 500,000 dollars (£100,000) which he earned in the practice of an exacting profession. It may be doubted whether any other American has run a like career. His sudden death of angina pectoris at Pleasanton, California, August 26th, 1898, occurred just as he had completed his fifty-sixth year." Dr. Pepper will be remembered by posterity as an eminent physician and as one of the most energetic philanthropists that the medical profession has produced.

Distribution of Mortality in New York City.

The health statistics of New York city reveal some curious and unexpected facts. The impression has always prevailed that overcrowded districts, insanitary surroundings, scantiness and poverty of diet, are the most important factors in determining the death-rate of a community, but from the statistics it would appear that the most healthy parts of New York City are those which are inhabited by the poorer classes, while in the quarters of the rich the death-rate is highest. An investigation has been made into the matter and the results have been published in a journal called the *National Provisioner*. The following are some of the examples quoted. The twelfth ward comprises within its boundaries one of the richest sections of the city with only 61·6 persons per acre, but among its population of 364,412 persons the total deaths were 2287, while in the thirteenth ward, which is inhabited entirely by the poorer classes, with 539·5 persons per acre, among its population of 56,802 persons the total deaths were only 196, the relative advantage being therefore greatly in favour of the thirteenth ward. Again, the Waldorf Astoria and Fifth-avenue society district is included in the twenty-first ward, which together with the nineteenth ward contains more multi-millionaires and millionaires than any other area of like extent in the world, but the mortality of these two wards, nevertheless, compares badly with that of the lowest quarters of New York. The twenty-first ward has 189·9 persons per acre, but among its population of 72,144 persons the total deaths were 442, whilst in the down-town slum district round the Bowery, Rivington-street, Norfolk-street, and Division-street, with 643·8 persons per acre and a population of 70,168 persons, the total deaths were 281. In the rich nineteenth ward, with 144·3 persons per acre, the total deaths in the population of 267,076 were 1575, whilst in the seventh ward, with 360·7 persons per acre, the total deaths in the population of 72,227 were only 403. The reasons for this seemingly anomalous state of affairs are not easy to give.

Condition of the United States Army in the Philippines.

The report of Colonel Charles R. Greenleaf, assistant surgeon-general United States army and chief surgeon in the Phillippines, has recently been issued and is full of useful information. The report covers a period of seven months, up to July 31st, 1900. With regard to the mortality of the army the report says: "The number of deaths in the army has steadily increased and a diminution of the death list can scarcely be expected. The number of men shot from ambush by small guerilla bands now exceeds those killed at any previous time and as time progresses and the men become more and more debilitated by tropical service the more marked will be the ratio of deaths. Gunshot injuries are the cause of the greatest mortality, with dysentery in the second place. There have also been a considerable number of deaths from typhoid fever, showing that the disease has gained a foothold in the islands. Dr. Greenleaf rightly lays much stress upon the supreme importance of sanitation both with armies in garrison and on the march, and expresses his satisfaction that American army medical officers are beginning thoroughly to recognise this fact. Owing to the scarcity of medical officers it has come about that, roughly speaking, 10,000 troops are serving at posts with practically no medical attendance. The number of posts in the Philippines was at the time the report was written 375 and was said to be constantly increasing. To fill these posts there were only 336 medical officers on duty in the islands.

April 13th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

The Bubonic Plague.

THE bubonic plague, which was thought to have disappeared, has broken out again. Four cases have occurred near Brisbane, two at Perth, one at Adelaide, while one case was introduced into Sydney on a troopship from Cape Town and proved fatal. The inspection of vessels and the other precautions against the introduction of the disease have been commenced again at all the ports. The destruction of rats has been going on steadily all the time, and all precautions will be rigidly enforced, the health authorities earnestly appealing to householders to coöperate in securing a maximum of cleanliness and in making it difficult for rats to live.

The Health of Sydney.

Mr. T. M. Kendall, medical officer to the Sydney Water and Sewerage Board, has presented his annual report on the health of the metropolis for the year 1900. He stated that, compared with the preceding year, the death-rate had increased, especially from diphtheria, diarrhœa, and typhoid fever. Deaths from phthisis had decreased. The mortality from typhoid fever was greater than it had been since 1896 and the disease was not confined to areas where it had been noted in former times, but had occurred in supposed healthy zones. The increase was probably attributable to neglect of householders in not keeping the house drainage in order. The greatest number of deaths from typhoid fever was reported during December. The highest temperature registered was also in December—viz., 104·1° F. on Dec. 12th. The rainfall was greater than it had been for several years, exceeding that of 1899 by 10·37 inches. The population had increased in the metropolis by 11,350. In the report of the health officer of the city of Sydney to the City Council it was stated that typhoid fever was likely to be as bad this summer as it was last summer. It is suggested that further legislation is necessary to provide means of making various diseases notifiable, when so proclaimed, without being infectious diseases under the Health Act, such as beri-beri, arsenical and phosphorus poisoning, lead poisoning, anthrax, &c.

Lunacy Administration in Victoria.

Reference has previously been made to the urgent necessity

for reform in connexion with the lunatic asylums in Victoria. Dr. McCreesy, the Inspector-General of Asylums, has over and over again called attention to the need for important changes in the department. In his last report he stated: "For some years it has been felt by the medical staff that the lunatic asylums are not giving the patients all the advantages that are obtainable from modern medical treatment." One crying need is the provision of paying wards for the class of cases usually sent to private institutions in other countries. Thirteen years ago the present Lunacy Act was passed, and one of its provisions is that no private lunatic asylums are permitted. The State, however, has failed to make adequate provision for the well-to-do insane and consequently the Act is practically evaded. Places known euphemistically as homes or retreats are established by private enterprise and are under no sort of control. The patients in them are really insane, but as they are not so certified it is impossible to prove that the Act has been evaded. The publicity given to an unfortunate case in which an inmate of one of these institutions committed suicide has once more directed attention to the state of the law as to lunacy and the treatment of the insane in Victoria. The press has been demanding reform for years, but Government after Government has allowed matters to drift. Investigation and reform are promised now and it is to be hoped that something will be done. Mr. W. Beattie Smith, medical superintendent of the Kew Asylum, has been granted leave of absence to visit Europe and America and will no doubt bring back with him the latest information on lunacy administration in the older countries.

Medical Men and Alcohol.

At a recent meeting of the council of the New South Wales Alliance (a temperance association) the following declaration was read. It had been signed by Dr. P. Sydney Jones, Dr. R. I. Ward, Dr. C. A. Dagnall Clark, Dr. B. J. Newmarch, Dr. W. Sheldon, Dr. F. H. Kyngdon, and Mr. C. Rorke.

We, the undersigned, recognising the widespread ignorance prevailing with regard to the nature and effects of alcoholic liquors and believing that much disease, insanity, pauperism, and crime in the community result from the indiscriminate consumption of these as beverages, feel called upon to make known the following facts: 1. That perfect health is compatible with total abstinence from all alcoholic beverages. 2. That alcoholic liquors, instead of increasing, as is popularly assumed, rather decrease capacity for work, and should be expressly abstained from when extremes of heat or cold have to be borne. 3. That the habitual use of alcoholic liquors in quantities conventionally deemed moderate is often productive of serious disease. 4. That alcoholic drinks should never be given to persons suffering from ill-health or disease except by the advice of a medical man. 5. That no medical man should prescribe alcohol without a grave sense of responsibility, and that the quantity and duration of time for taking it should be definitely fixed.

This declaration has come in for a good deal of adverse criticism by the lay press as giving very little information.

Presentation to Dr. T. H. Fiaschi.

Dr. T. H. Fiaschi, of the Army Medical Corps, was entertained at a complimentary smoking concert by the representatives of the wine industry, to welcome him back from the war in South Africa where he has rendered such signal service. Dr. Fiaschi was presented with a very handsome illuminated address, which read as follows:—

To Major Thomas Henry Fiaschi, Army Medical Corps, New South Wales, M.D., Ch.D. Pisa and Florence, Italy.—Dear Sir,—As representatives of the wine industry of New South Wales we are desirous of presenting you with this address of welcome as a mark of our appreciation and recognition of your unremitting and valuable services in connexion with viticultural pursuits. Whilst we are pleased at knowing we have amongst us one who has devoted so much time and trouble to the furtherance of the industry with which we are so closely identified as your esteemed self, we cannot allow the occasion to pass without in some way recognising your many and humanitarian services rendered at the front during the South African campaign.

Cases of Apparent Death.

Some sensation was caused recently at the Newcastle Hospital. An old man was brought there and when examined by the medical officer was pronounced to be dead. The body was then removed to the morgue. A little time afterwards movement and heavy breathing were observed and it was found that the man was alive. He was removed to a ward, but he died a few minutes later. When he had been first examined no pulse could be felt and there was no respiration. A somewhat similar case occurred a short time previously at Fitzroy, Melbourne. A patient was pronounced to be dead by a local medical man but later was found by the friends to be alive and was removed to St. Vincent's Hospital, where he lived for some days, dying ultimately from uræmia.

What is Medical Advertising?

On Jan. 2nd the Sydney *Daily Telegraph* published a special Commonwealth issue, a portion of which was devoted to short articles under the heading "Glimpses of the Century." The medical subjects and writers were respectively:—Surgery: A. MacCormick, M.D. Edin. Malaria: W. Camac Wilkinson. Medicine: A. Jarvie Hood, M.B., C.M. Glasg. Dealing with the Insane: Chisholm Ross, M.D. Sydney. Sanitation: T. Mailler Kendall, L.R.C.P. and L.R.C.S. Edin. Use of Serums in Disease: W. Camac Wilkinson, M.D. Treatment of Inebriates: J. M. Creed, M.D., M.L.C. The names of these professional men were printed over the respective articles and their facsimile signatures appeared beneath them. The subject was brought under the notice of the council of the New South Wales Branch of the British Medical Association, which passed the following resolutions:—

That the attention of the council of the New South Wales Branch of the British Medical Association having been called to a series of articles in the Sydney *Daily Telegraph* of Jan. 2nd, 1901, over facsimile signatures of the authors, the council regrets to find that some of the contributors are members of this branch. The council considers it undesirable that signed articles on medical subjects should appear in the lay press.

That the foregoing resolution be forwarded to the authors of the signed articles who are members of the branch, with the expression of a hope that each contributor will offer some explanation as to the appearance of his signature.

It is understood that the contributors intend quietly to ignore these resolutions.

Standard Strength of Liquors.

The Board of Health of New South Wales has recommended the following standard strengths for spirituous liquors: whisky and brandy, 25·0 under proof; rum, 30·0 under proof; and gin, 35·0 under proof.

Obituary.

Mr. John E. W. Cruise, M.B., B.Ch., B.A.O. R.U.I., died recently at Orange, New South Wales, at the age of 36 years. He was a son of Sir Francis Cruise of Dublin. He had been practising at Orange for seven years and was held in high esteem by a large circle of personal friends as well as by his numerous patients, for he was a very capable practitioner. The cause of death was cerebral hæmorrhage.—A well-known figure has been removed from the medical circles of Sydney by the death of Mr. Robert Hunter, L.R.C.P. & S. Edin., of Jamieson-street. He was a native of Kilrea, Derry, Ireland. He landed in Sydney in 1873, and was at first assistant to the late Dr. Charles M'Kay, but four years later he started an independent practice. He was noted for his charitable and philanthropic disposition.—One of the oldest county practitioners in Victoria died recently in the person of Dr. Samuel Reynolds who had been practising in Mansfield for over 40 years and was 77 years of age at the time of his death.

March 12th.

Obituary.

WILLIAM MOORE, M.D. DUB., F.R.C.P. IREL.

DR. WILLIAM MOORE, of 67, Fitzwilliam-square North, Dublin, who died on April 17th in his seventy-fifth year, had been for a great many years one of the foremost representatives of his profession in Ireland. The son of a medical man, he chose a similar path in life for himself and received his medical education at Trinity College, Dublin. In 1850 he was admitted a Licentiate of the Royal College of Surgeons in Ireland and graduated as M.B. in Dublin University. In 1855 he became a Licentiate of the King and Queen's College of Physicians (now the Royal College of Physicians of Ireland), in 1859 the Fellowship was conferred on him, and in 1883 he had the honour to be elected President. In 1860 he took the M.D. degree at his University. From 1868 to 1883 Dr. Moore was King's Professor of Practice of Medicine in the School of Physic in Trinity College. He was also an examiner in clinical medicine at Trinity College, physician to Sir Patrick Dun's Hospital, and physician to the National Hospital for Children. In 1885 he succeeded the late Dr. Benjamin George MacDowel as physician-in-ordinary to the Queen in Ireland and after Her Majesty's death last January he received the appointment of physician-in-ordinary to the King in Ireland.

Dr. Robert Lyons, nominated by the Crown to represent Ireland in the General Medical Council, died in 1886, and the vacancy thus created was filled by Dr. Moore, who was a member of the Council from January, 1887, to November, 1897, when he resigned. Dr. Moore was a member of many learned societies, and had been President of the Pathological Society and of the Section of Medicine of the Royal Academy of Medicine in Ireland. He was a man of mark, not only in Dublin but also in the North of Ireland. He had a country residence called Moore Lodge at Ballymoney, Antrim, of which county he was high sheriff, and his eldest son, Mr. William Moore, K.C., was elected Member of Parliament for North Antrim in 1899. Dr. Moore was the author of several small works on medical subjects, and he contributed many articles to the medical journals. Among his separately published works may be mentioned "Infantile Mortality," 1859; "On Typhus and Typhoid Fever," 1871; and "On Epidemic Scarlatina," 1875. His contributions to periodical or serial literature included articles on Strumous Peritonitis, Idiopathic Tetanus, Aneurysm and Dementia, Cerebro-spinal Complications in Continued Fever, Acute Rheumatism and Rheumatic Pericarditis, Affections of the Chest in Children, and Diseases of the Heart and Great Vessels.

During his long life Dr. Moore had witnessed many improvements in medical practice and, it must be admitted, many changes in medical opinion. His mature judgment and well-trained mind predisposed him to caution in the acceptance of new doctrines, a mental attitude which was not undesirable under the circumstances, entrusted as he was with interests of more than usual importance.

GEORGE STONE, L.R.C.P. & L.R.C.S. EDIN., L.S.A.

THIS well-known aural surgeon met his death on April 21st from an attack of pneumonia after a week's illness that indicated a very virulent type of infection. He was himself a man of apparently good constitution, who commonly enjoyed good health, and whose habits were both regular and frugal; in fact, everybody would have foretold for him a good prospect of long life. As it is he died at the age of about 52 years, mourned by a very large circle of relatives and friends. Mr. Stone began his medical studies in Liverpool and afterwards went to Vienna where he enjoyed the friendship and instruction of Professor Politzer whose methods of investigation into diseases of the ear he largely followed. Some ten years ago, also, he translated from the German into English that author's exhaustive work on the "Dissection of the Human Ear."

Mr. Stone began practice as an aural and ophthalmic surgeon, and was for some years on the staff of the Liverpool Eye and Ear Infirmary. About 15 years ago he gave up eye practice and confined himself to the study and treatment of ear disease, in which he enjoyed a reputation and a practice of the first rank. He was a man of quiet but very courteous demeanour, with a somewhat retiring disposition, but possessed of the soul of honour, unflagging industry in the pursuit of knowledge and the welfare of his patients. He had a great faculty for languages and was familiar with Spanish, Italian, French, Greek, and German, both colloquially and in a literary sense. He was also a stenographer of many years' standing and well known by correspondence to other medical stenographers. Mr. Stone will be missed not only by his immediate circle and neighbourhood, but from the international and other meetings of otologists where he was both familiar and respected.

CHARLES KEARNS DEANE TANNER, M.D. R.U.I., L.R.C.S. IREL., M.P.

DR. TANNER, whose death on the night of April 21st is announced, was the well-known Nationalist Member of Parliament for Mid Cork. Born in 1850, the son of the late Mr. W. K. Tanner, M.D., he received his education at Winchester, Paris, Queen's College, Cork, and the Universities of Leipsic and Berlin. Had he continued in the practice of his profession he would very probably have made a brilliant success. He graduated as M.D. and M.Ch. at the Queen's University and was for some time physician to several Cork hospitals, besides being demonstrator in Anatomy at Queen's College. But having elected to enter politics he sat continuously first as a Nationalist and after the split as an Anti-Parnellite Nationalist for the Mid Division of county Cork. In the House of Commons he certainly gained notoriety, but the game of politics has to be played in the House of Commons in a particular way, and Dr. Tanner did not play the game as it should be played, and consequently never had the least influence over the assembly which he often outraged and sometimes amused. Despite his frequent breaches of good manners and his irascible disposition he was a most kindly companion and popular among those who knew him well. He was a "whip" of his party. Dr. Tanner married a daughter of the late Captain John McDonnell Webb, formerly Captain Royal Irish Dragoons.

THOMAS WILSON, M.D. ST. AND., M.R.C.S. ENG., L.S.A.

THE death is announced at the age of 82 years of Dr. Thomas Wilson. He was the eldest son of the late Mr. Thomas Wilson, the Hull ship-owner. Dr. Wilson became a Member of the Royal College of Surgeons of England and a Licentiate of the Society of Apothecaries in 1840, while in 1864 he graduated as M.D. at the University of St. Andrews. He practised for some time in Hull, but late in life retired to Scarborough where he died.

THE REV. RICHARD PRIOR WINTLE, M.R.C.S. ENG., L.S.A.

THE Rev. Richard Prior Wintle died at Cowley St. John, Oxford, on April 16th, in his sixty-first year. Mr. Wintle assisted in the services at the church of St. Mary and St. John, Cowley, on Easter Day, and, shortly after contracting a chill, pneumonia developed, to which he succumbed. The deceased was the son of Dr. F. T. Wintle of The Warneford, Headington, Oxfordshire. He received his medical education at St. George's Hospital and became qualified as M.R.C.S. Eng. in 1863. He also held the diploma of L.S.A. He practised the medical profession for a few years, but in 1878 he entered the Truro Theological College and in 1880 was admitted to holy orders, his first curacy being at St. Mary's, Truro, with Canon Harvey. He was subsequently rector of Weston-in-Gordano, near Bristol, and later curate of Frome Selwood, Somerset. Until recently he was for several years a member of the clerical staff at Holy Nativity Church, Knowle, a suburb of Bristol, where he gave his services voluntarily and only left on account of ill-health. Mr. Wintle was a member of the council of the Guild of St. Luke and took great interest in the work of the society. His quiet and kindly manner endeared him to a large circle of friends in Bristol and the district and sincere sympathy is felt with Mrs. Wintle, more particularly in the parish of Knowle, where Mr. Wintle was regarded with much affectionate esteem.

Medical News.

SOCIETY OF APOTHECARIES OF LONDON.—In April the following candidates passed in the subjects indicated:—

Surgery.—P. J. R. Bucknill (Section II.), Manchester and Dublin; T. Burdekin, University College Hospital; C. J. Francis, Guy's Hospital; A. W. H. Grant (Sections I. and II.), Charing Cross Hospital; W. J. Hogg (Section II.), Belfast and Middlesex Hospital; F. A. Hort, Middlesex Hospital; E. E. Naggiar (Sections I. and II.), St. Mary's Hospital; and R. A. Pitter, Middlesex Hospital.

Medicine.—K. M. Betts (Section I.), Royal Free Hospital; P. J. R. Bucknill (Section II.), Manchester and Dublin; W. H. Crossley, St. Bartholomew's Hospital; G. B. Dixon (Sections I. and II.), Charing Cross Hospital; C. F. W. Dunn, Middlesex Hospital; D. Fletcher, St. Bartholomew's Hospital; W. Garstang (Section I.), Manchester; W. T. Harris (Sections I. and II.), St. Thomas's Hospital; H. Jessop (Section II.), Birmingham; E. F. Lamport, Royal Free Hospital; and A. H. Thomas (Sections I. and II.), St. Mary's Hospital.

Forensic Medicine.—W. Alcock, Sheffield; A. A. E. Baptist, Calcutta; K. M. Betts, Royal Free Hospital; A. A. F. Clarke, St. Thomas's Hospital; J. H. Clements, Birmingham and University College Hospital; W. H. Crossley, St. Bartholomew's Hospital; G. B. Dixon, Charing Cross Hospital; W. Garstang, Manchester; M. S. W. Gunning, University College Hospital; W. T. Harris, St. Thomas's Hospital; E. F. Lamport, Royal Free Hospital; A. E. Malaher, St. Thomas's Hospital; L. R. Marshall, St. Mary's Hospital; D. V. Muller, Charing Cross Hospital; H. Richardson, Leeds; E. E. Risien, St. Bartholomew's Hospital; and A. H. Thomas, St. Mary's Hospital.

Midwifery.—A. A. E. Baptist, Calcutta; F. M. Boclet, Charing Cross Hospital; C. W. S. Boggs, Leeds; W. Garstang, Manchester; M. S. W. Gunning, University College Hospital; L. R. Marshall,

St. Mary's Hospital; S. A. Mahmood and W. Miles, Middlesex Hospital; A. U. Parkhurst, Cardiff and St. Mary's Hospital; B. E. Sansom, St. Thomas's Hospital; T. Scatchard, Leeds; and A. W. D. Thomson, St. George's Hospital.

The diploma of the Society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery: T. Burdekin, A. W. H. Grant, F. A. Hort, H. Jessop, E. F. Lamport, L. R. Marshall, and R. A. Pitter.

UNIVERSITY OF BIRMINGHAM.—At the examination for the Diploma in Public Health held in April the following candidates were successful:—

Parts I. and II.—Francis William Bonis and Aaron Sims.

UNIVERSITY OF DURHAM.—At the second examination for the degree of Bachelor in Medicine, held in April, the following candidates satisfied the examiners:—

OLD AND NEW REGULATIONS.

Anatomy, Physiology, and Materia Medica.—First-Class Honours: James William Gibson, College of Medicine, Newcastle-upon-Tyne. *Second-Class Honours:* Fred Stoker, Walter Haward, and William John Phillips, B.Sc., College of Medicine, Newcastle-upon-Tyne; and John Spencer Hall, M.R.C.S., L.R.C.P., St. Thomas's Hospital. *Pass List:* Frederick Durnford Atkins, St. Thomas's Hospital; Frederick George Armstrong, College of Medicine, Newcastle-upon-Tyne; Cyril Prichard Burd, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; James Alexander Bennett, College of Medicine, Newcastle-upon-Tyne; John Frederick Bridge, Birmingham University; Harold Linton Currie, William Gibbons, Albert James Gilbertson, Alfred Herbert Heslop, Thomas Charles Hunter, Lizzie Evelyn Kendal, and Bernard Warner Lacey, College of Medicine, Newcastle-upon-Tyne; Sidney Nix, St. Mary's Hospital; Donald Murray Ross and Mary Raw, College of Medicine, Newcastle-upon-Tyne; Douglas Montague Brooking Snell, St. Thomas's Hospital; Thomas John Samuel Suffield, L.R.C.P., L.S.A., London Hospital; Janet Arthur Vaughan, London School of Medicine for Women; and Hermann Wolfe and William Frank Wilson, College of Medicine, Newcastle-upon-Tyne.

COST OF VACCINATION.—At the meeting of the Falmouth Board of Guardians held on April 19th it was reported that the cost of vaccination by the guardians during the past 12 months had amounted to £527.

Two ladies have just passed the German State Examination for medical practitioners in Freiburg, Baden, both obtaining the mark "very good." These are, it is stated, the first ladies to qualify in the ordinary way in the German Empire.

INCREASE OF SALARY.—At a meeting of the Somerset County Council held on April 9th it was decided to increase the salary of the county analyst (Dr. H. J. Alford) from £150 to £200 per annum. Dr. Alford has held the appointment for nearly 20 years, during which time he has analysed 20,456 samples.

NOTIFICATION OF MEASLES AND CHICKEN-POX.—At the meeting of the Dartmouth Town Council held on April 9th it was decided, upon the recommendation of the sanitary committee, that measles and chicken-pox should be removed from the schedule of diseases notifiable under the Infectious Diseases Notification Act. The medical officer of health was instructed to give the authorities of H.M.S. *Britannia* immediate notice of any case of infectious disease occurring in the town.

CHARING CROSS HOSPITAL.—On St. George's Day, April 23rd, a special matinée was held at the Pavilion Music Hall in aid of Charing Cross Hospital. The entire staff and orchestra of the Pavilion gave their services for the occasion and, as was fitting, roses were much in evidence. Altogether there were 36 "turns," in which most of the prominent theatrical and music-hall artists were represented. Tea and coffee were gratuitously supplied by Mrs. Robertson of New Bond-street. Messrs. Bechstein lent the grand piano and a sum of £230 was taken at the doors. Warm thanks are due to all who so kindly gave their time and skill towards affording help to the sick and needy.

ROYAL UNITED HOSPITAL, BATH.—On April 12th a meeting was held at the Bath Guildhall, under the presidency of the Mayor, in support of the Royal United Hospital, Bath. The Rev. E. Handley, President of the hospital, stated that the overdraft at the bankers now amounted to £3500. The Earl of Cork, Lord Edmund Fitzmaurice, Sir John Goldney, Canon Quirk, and others made speeches in favour of the hospital and pleaded for more financial support. £155 were subscribed at the meeting and it was decided to recommend that collections should be made at the various places of worship on Nov. 3rd in aid of the hospital and that subscriptions should be raised in the various towns and villages around Bath for the same purpose.

Parliamentary Intelligence.

HOUSE OF COMMONS.

THURSDAY, APRIL 18TH.

The Budget.

THE proposals of the Budget introduced at this sitting by the Chancellor of the Exchequer were 2*d.* on the income-tax, making it 1*s.* 2*d.* in the £1, a duty on sugar of roughly speaking ½*d.* per lb., a duty on export coal of 1*s.* per ton, suspension of the Sinking Fund for another year, and borrowing powers to the extent of £60,000,000. In dealing with the sugar-duty the Chancellor of the Exchequer explained that glucose, used principally for the manufacture of jam, aerated waters, and beer, and containing about 45 per cent. of pure sugar, would be taxed at the rate of 1*s.* 8*d.* per hundredweight.

Meat for the Army.

Lord STANLEY announced in reply to a question that the terms of the new contracts for the supply of meat to the army would exclude foreign meat.

MONDAY, APRIL 22ND.

Death Certification.

Lord HUGH CECIL asked the Secretary of State for the Home Department (1) whether his attention had been called to the certificate of death given in the case of a certain Lily Graves; (2) whether he was aware that it was alleged that the certificate was so far false that it omitted a material circumstance, and that the Registrar-General had been asked, and had declined, to take any action in respect of such allegation; and (3) whether the Home Secretary would take steps either in regard to this particular certificate or generally to safeguard the accuracy of certificates of death.—Mr. WALTER LONG replied: My right hon. friend has asked me to answer this question. The reply to the first two paragraphs is in the affirmative. As regards the third paragraph, I have no authority to interfere in the matter, but I may state that the Registration of Births and Deaths Act, 1874, provides that any person who wilfully makes a false certificate for the purpose of the Act shall be liable to a penalty. There can be no doubt that the omission from the certificate of death of the fact that the deceased person died while under the influence of an anæsthetic is to be regretted; but I understand that the Registrar-General was not satisfied that the omission constituted a definite offence against the Act, and that under all the circumstances of the case he did not consider that any action could usefully be taken by him, more especially as the matter was not brought under his notice until eight months after the death occurred.

Troops in Hospital in South Africa.

Lord STANLEY stated, in answer to a question, that the last report, dated March 8th, 1901, with regard to the number of troops in hospital in South Africa showed 13,993.

TUESDAY, APRIL 23RD.

Prosecutions for the Sale of Diseased Meat.

Mr. FIELD asked the President of the Local Government Board whether he was aware that a person charged with selling articles of food in contravention of the Sale of Food and Drugs Act must be informed of the exact nature of his alleged offence and of the alleged adulteration, as stated in the analyst's certificates, while persons charged with selling diseased meat under the Public Health Act, 1875, were not informed of the exact nature of the disease, but were vaguely charged with selling meat which was diseased or unsound or unfit for food; and, as under these circumstances the defendant could not prepare his defence, whether he would take steps to oblige sanitary authorities to state the exact nature of all such charges and medical officers of health to furnish to the person whose meat was seized a certificate of the exact nature of the disease affecting the meat seized.—Mr. LONG replied: I am aware of the different requirements of the Sale of Food and Drugs Act and of the Public Health Act with regard to the matters referred to. I may point out that the adulteration of food and drugs can ordinarily be discovered only by the application of chemical tests. This is not so as regards meat which is diseased or unsound or unfit for food. The two classes of cases do not, therefore, seem to be parallel. I cannot say that I think that there is any sufficient ground for proposing such a change in the law as that suggested in the question.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

BRAMWELL, E., M.B., C.M. Edin., M.R.C.P. Lond., has been appointed Medical Assistant, Edinburgh Royal Infirmary.

BURLAND, HERBERT, L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Finedon District of Northants.

CHANCELLOR, WILLIAM, M.B., B.Ch. Irel., has been appointed Certifying Surgeon under the Factory Acts for the Banbridge District of county Down.

CUSSE, E., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Broughton District of Hants.

DAVIES, H. H., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Cerrig-y-Druidion District of Denbighshire.

DWYER, F. C., M.D. Dubl., B.Ch., F.R.C.S. Irel., has been appointed Professor of Surgery, Royal College of Surgeons in Ireland, vice Sir W. Stoker.

FOSTER, F. W., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Walton-on-Naze District of Essex.

GILES, ARTHUR E., M.D., B.Sc., F.R.C.S., M.R.C.P., has been appointed Gynæcologist to the Hospital of St. Francis, New Kent-road, London.

GRACE, GERALD, L.R.C.P. Lond., M.R.C.S., has been appointed Surgeon to the Middleburgh District of the Transvaal.

GRAHAME, ALEX., M.B., B.Ch. Irel., has been appointed a Civil Medical Officer to the troops in South Africa.

LINDSAY, JAMES F., M.B., C.M. Edin., has been appointed Medical Officer for the prison, Dunblane, vice C. W. Howatson, resigned.

MACDONALD, JAMES H., M.B., Ch.B. Glasg., has been appointed Senior Assistant Medical Officer to the Govan District Asylum, Crookston, near Glasgow.

PIERCE, R. W. C., B.Sc., M.B. Lond., D.P.H. Camb., has been appointed Medical Officer to the Guildford, Godalming and Woking Joint Hospital Board.

POLLOCK, R. G., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Warlingham District of Surrey.

RAPER, M. H., M.D. Lond., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Great Wakering District of Essex.

REES, EDWARD DAVIES, M.R.C.S., L.R.C.P. Lond., L.S.A., has been appointed Medical Officer to the Newtown and Llandidloes Union Workhouse, Caersws, Mont.

ROBINSON, W. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Sonning District, Wokingham Union, vice B. Brooks.

SMITH, ALFRED CHARLES FESTING, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed to the temporary charge of troops at Bull Point, Devonport.

TIGHE, JOHN V. G. B., has been appointed Second Assistant Medical Officer to the North Riding Lunatic Asylum, Clifton, York.

YOUNG, ARCHIBALD JOHN, L.R.C.P., L.R.C.S. Edin., L.F.P. & S. Glasg., has been appointed Medical Officer of Health by the Whitefield District Council, vice A. T. Dochard, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BARNWOOD HOUSE HOSPITAL FOR THE INSANE, Gloucester.—Junior Assistant Medical Officer. Salary £150 per annum (rising to £170 after the first year) with board, &c.

BRADFORD ROYAL INFIRMARY.—Dispensary Surgeon, single. Salary £100 per annum, with board and residence.

BRIGHTON THROAT AND EAR HOSPITAL, Church-street, Queen's-road.—Non-resident House Surgeon for six months. Salary at the rate of £75 per annum.

BRISTOL GENERAL HOSPITAL.—Assistant House Surgeon. Salary £50 per annum, with board, residence, &c.

BURTON-ON TRENT INFIRMARY.—House Surgeon. Salary £150 the first year and £170 the second year, with furnished rooms, coal, and gas free.

CANCER HOSPITAL, Fulham-road, S.W.—House Surgeon. Salary £70 per annum, with board and residence.

CARDIFF INFIRMARY.—Assistant House Surgeon for six months, renewable. Salary at the rate of £75 per annum, with board, washing, and apartments.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Resident Medical Officer, unmarried. Salary £60 per annum.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY.—Resident House Surgeon. Salary £110 per year, with board, apartments, and laundress.

CITY OF SHEFFIELD HOSPITALS.—Resident Medical Superintendent. Salary £250 per annum, with board, lodging, and attendance.

COUNTY ASYLUM, Prestwich, Manchester.—Assistant Medical Officer, unmarried. Salary £150 per annum, increasing to £250, with board, apartments, and washing.

COUNTY ASYLUM, Whittingham, Lancashire.—Junior Assistant Medical Officer, unmarried. Salary £150, increasing to £200, and on promotion to £250, with furnished apartments, board, washing, and attendance.

DENTAL HOSPITAL OF LONDON, Leicester-square.—Assistant Dental Surgeon.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—Assistant Surgeon.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, Bartlett's-buildings, Holborn-circus, E.C.—Resident Medical Officer. Salary £120 per annum, with residence, attendance, coals, and gas, and permission to take resident pupils.

GUARDIANS OF ST. MARY, Islington.—Medical Officer. Salary £100 per annum.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, W.—Senior Clinical Assistants.

HOSPITAL FOR WOMEN, Soho-square, London, W.—House Physician for six months. Salary £30.

HULL ROYAL INFIRMARY.—Junior Assistant House Surgeon. Salary £60, with board and lodging.

JESSOP HOSPITAL FOR WOMEN, Sheffield.—House Surgeon, unmarried. Salary £75 per annum, with board, lodging, and washing.

LIVERPOOL STANLEY HOSPITAL.—House Surgeon. Salary £100. Also Third House Surgeon, £70, with residence, board, &c.

LONDON COUNTY ASYLUM, Hanwell, W.—Junior Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, and washing.

LONDON TEMPERANCE HOSPITAL.—Assistant Surgeon. Honorarium 50 guineas a year.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer, unmarried. Salary £150 per annum, with board and residence.

METROPOLITAN BOROUGH OF LEWISHAM.—Medical Officer of Health and Public Analyst. Salary £300 per annum.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Resident Medical Officer. Salary £80 per annum, with board, attendance, and washing.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART, Soho-square.—Physician.

PARISH COUNCIL OF APPLECROSS, Loch Torridon District.—Medical Officer and Vaccinator. Salary £95, free house accommodation and other emoluments.

ROTHERHAM HOSPITAL.—Assistant House Surgeon. Salary £30 per annum, with board, lodging, and washing.

ROYAL PORTSMOUTH HOSPITAL.—Assistant House Surgeon. Salary £50 per annum, with board and residence.

ROYAL SEA BATHING HOSPITAL, Margate.—Assistant Resident Surgeon. Salary £60 per annum, with board and residence.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—Assistant House Surgeon. Salary £50, with board, residence, and laundry.

ST. MARY'S HOSPITAL, Quay-street, Manchester.—Two Medical Officers, Senior and Junior. Salary £70 and £65 respectively, with board and residence.

SOUTHPORT INFIRMARY.—Resident Junior House and Visiting Surgeon (unmarried), for six months. Honorarium at the rate of £60 per annum, with residence, board, and washing.

STOCKPORT INFIRMARY.—House Surgeon. Salary £100, with residence, board, and washing. Also Junior Assistant House Surgeon for six months. Salary at the rate of £24 per annum, with board, washing, and residence.

SUNDERLAND INFIRMARY.—House Physician and House Surgeon. Salary £100, with board and residence, increasing by £15 annually for three years.

SWANSEA GENERAL AND EYE HOSPITAL.—Resident Medical Officer. Salary £75 per annum, with board, apartments, washing, and attendance.

THE CHIEF INSPECTOR OF FACTORIES gives notice of a Vacancy as Certifying Surgeon under the Factory Acts at Melbourne, in the County of Derby.

WEST HAM HOSPITAL, Stratford, E.—Junior House Surgeon. Salary £75 per annum, with board, residence, &c.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—Medical Officer to the Provident Dispensary. Salary £100 per annum, with board, lodging, and washing.

WREXHAM INFIRMARY.—House Surgeon. Salary £100 per annum, with board and washing.

Births, Marriages, and Deaths.

BIRTHS.

BOWIE.—On April 23rd, at Hertford-street, Mayfair, the wife of Alex Bowie, M.D., C.M., L.R.C.P. Edin., of a son.

KIRTON.—On April 21st, at Ashville, Honor Oak, S.E., the wife of Charles I. Kirton, M.B. Lond., M.R.C.S., L.R.C.P., of a son.

LONG.—On April 12th, at Priory road, Dover, the wife of J. Reginald Long, L.R.C.P. Lond., M.R.C.S., of a daughter, stillborn.

MACCARTHY.—On April 18th, at Portobello House, Dublin, the wife of Brendan MacCarthy, M.D., D.P.H., Medical Inspector Local Government Board, Ireland, of a son.

MARRIAGES.

COOPER—DAY.—On April 17th, at St. Stephen's, Gloucester-road, by the Rev. F. W. Worsley, M.A., Charles Edward Cooper, B.A., M.B. Cantab., of Ivybridge, S. Devon, younger son of the late Joseph Cooper, of Colyford, Devon, to Fanny Elizabeth, third daughter of R. Newcombe Day, of Harlow, Essex.

HULKE—HAWKINS.—On April 17th, at St. Barnabas's, Kensington, Sydney Backhouse Hulke, F.R.C.S. Eng., third son of the late Frederick Thomas Hulke, of Admiralty House, Deal, to Irene Beatrice, youngest daughter of Major-General E. L. Hawkins, late R.A.

MAVOR—GOWER.—On April 16th, at St. Mary Magdalene's, Enfield, William S. Mavor, M.D., of Waltham-cross, to J. Lillias Gower, eldest daughter of the late Edwin Gower, of Theobalds, Waltham-cross, Herts.

WILLIAMS—WHEAT.—On April 17th, at Christ Church, Pitsmoor, Sheffield, Ralph Paul Williams, M.B. Lond., M.R.C.S., L.R.C.P. Lond., of Slough, to Mabel Grace, third daughter of John James Wheat, Norwood Hall, Sheffield.

YOUNG—DA COSTA.—On April 17th, at Christ Church, Longcross, Surrey, Charles W. F. Young, M.D., to Mabel Catherine, daughter of the late D. C. Da Costa.

DEATHS.

BAMPFYLDE.—On April 22nd, James Bampfylde, M.R.C.S. Eng., L.S.A. Lond., D.P.H. Eng., aged 26, youngest son of the late Major Bampfylde of Bath.

BARCLAY.—On April 17th, at Sumner-place, S.W., John Barclay, M.D., F.R.C.P., aged 81.

OGLE.—On April 19th, at Charlestown, Natal, Arthur W. Ogle, M.R.C.S., aged 48.

TANNER.—On April 21st, at Reading, Charles Kearns Deane Tanner, M.D. Irel., M.P.

TEBAY.—On March 25th, 1901, at Manoas on the Amazon river, S. America, Michael Kemble-Tebay, M.R.C.S. Eng., L.R.C.P. Lond., aged 30, only son of Emily and the late M. J. Tebay, M.R.C.S. Eng., L.S.A., of Woburn-hill, Addlestone, Surrey.

WATKINS.—On April 21st, at Towcester, Edwin Thomas Watkins, M.D. (late R.N.), of Cambridge-gardens, Notting-hill, W., aged 76.

N.B.—A fee of 5s is charged for the insertion of Notices of Births, Marriages, and Deaths

Notes, Short Comments, and Answers to Correspondents.

THE LEICESTERSHIRE SAMARITAN INSTITUTE FOR DISEASES OF WOMEN.

A CORRESPONDENT, who is a medical man, has forwarded to us the following circular which was sent to him. He informs us that he knows nothing of the presumable sender—namely, the practitioner whose name appears at the bottom of the circular.

"Leicestershire Samaritan Institute for Diseases of Women,
1A, Bowling Green-street, Leicester.

DEAR SIR,—I know how difficult it is (however willing one may be) to thoroughly examine and treat cases of uterine mischief that one may meet with on general practice. Lack of time prevents the busy practitioner taking up and treating many cases that would rapidly improve under appropriate local treatment; and the inadequate remuneration one receives for contract work of all kinds would not cover the cost of diagnostic instruments, let alone compensate for the time taken up in the work. Again, lack of material in the shape of uterine cases prevents many taking that interest in gynæcology which is essential to success. By sending such cases to an institute where they may be taken properly in hand the already heavy burden of the practitioner may be lightened. I inclose six free tickets for use at the out-patient department and venture to hope that you will make use of them in suitable cases. I have accommodation for a limited number of in-patients where operation is necessary. Yours faithfully,

JOHN SIDES D. MACCORMAC."

We cannot find the name of the above institute in the list of charities given in Burdett's "Hospitals and Charities," in the "Annual Charities Register and Digest," or in the list of provincial hospitals given in the "Medical Directory," so that we are unable to form any idea as to its status. But whatever this be we do not think it is fitting for a charitable institute to tout for patients in any way. More especially do we consider it most objectionable for the medical officer, or one of the medical officers, to act as tout and to write circulars to his medical brethren implying that they do not know their own business. The six free tickets, we observe, are endorsed with a notification that a sum of 1s. is charged for each visit to defray the cost of medicine, bottles, &c. Perhaps the secretary of the institution, if such official there be, will kindly send us a report of the working of the charity, if one is published. If there is no secretary and no report, possibly Mr. John Sides D. MacCormac will give us some further information as to the members of the staff, what are their qualifications, and what are their claims to possess gynæcological knowledge superior to that of the duly qualified general practitioner.

HOME NURSING.

To the Editors of THE LANCET.

SIRS,—I am about to deliver a course of six lectures on home nursing to the probationers and others at the hospital at which I am house surgeon. The syllabus will be that given in Caird and Cathcart's Manual—i.e., 1, the Sick Room; 2, Infection and Disinfection; 3, 4, and 5, Details of Nursing; 6, Application of Local Remedies. Can you or some of your readers advise suitable books written on the above lines? I am, Sirs, yours faithfully,

April 24th, 1901. H. S.

THE EFFECTS OF THYROIDIN.

To the Editors of THE LANCET.

SIRS,—Will some reader who has experience inform me where I can procure information on the subject of poisoning by excessive doses of thyroidin? The subject of inquiry took three tabloids of B. & W.'s preparation three times a day for 2—3 months. He suffered from intermittent pulse, from neuralgic pains in the loins, from loss of power in the legs (especially at night), and from intoxication after very small quantities of whisky (the intoxication affecting the legs only). It was taken with the idea of reducing weight and this it certainly achieved. The result was a reduction of two stones in weight (about), a feeling of *bien-être*, and an increase of appetite. It has been given up for nearly two years with certain benefit, but not cure, the leg weakness persisting. There is also inability to take strychnia and other astringents. I have been advising the patient, but have not met with any literature.

I am, Sirs, yours faithfully,

April 23rd, 1901. K. E. M.

THE CERTIFYING OF STILL-BORN CHILDREN.

On April 16th Mrs. Nora Lunn appeared before Mr. Paul Taylor at Southwark Police-court to answer a charge of wilfully and falsely making a declaration under the Births and Deaths Registration Act of 1874 to the effect that a certain child born alive was still-born, knowing that such declaration was false. The defendant pleaded guilty but said that she did not know that she was doing wrong. This was her first offence. The child lived barely an hour and the mother was anxious not to lose the parish relief. Mr. Paul Taylor fined the defendant £10 or in default six weeks imprisonment, saying that for a midwife to give a false certificate might lead to crime upon a wholesale scale. We quite agree with the magistrate's remark and in addition we consider that it is a perfect scandal that midwives should be allowed to give death certificates at all. The whole system of death certification is in a hopelessly unsatisfactory condition and the present laws dealing with the system need to be revised. We must confess that we do not understand Mrs. Lunn's remark about parish relief. Surely in Southwark parish relief is not granted to anyone having a still-born child. If so it seems to us to be a premium upon murder. If it is not so Mrs. Lunn's remark has no meaning.

"THE TREATMENT OF THREAD-WORMS."

To the Editors of THE LANCET.

SIRS,—In reply to the letter of "Worms" in THE LANCET of April 20th, p. 1179, I recommend him to administer balsam of copaiba (about seven minims) three times a day either in capsules or as a mixture with a small dose of castor oil two or three times a week. In the course of a fortnight he will, I think, have no reason to regret the trial. By this time probably no living worms will be passed. Solution of the perchloride of iron should then be given.

I am, Sirs, yours faithfully,

Wanstead, N.E., April 23rd, 1901. FRANK ANGLES.

"MEMORIAL TO THE LATE DR. ARCHIBALD HAMILTON JACOB."

AMOUNT already announced, £359 9s.

	£	s.	d.		£	s.	d.
Mr. M. A. Brennan ...	1	1	0	Mr. Graves Stoker... ...	1	0	0
Mr. P. Cahill	0	10	6	Dr. G. Peirce	1	1	0
Mr. C. A. Skelly	1	1	0	Dr. R. G. O'Flaherty ...	1	1	0
Mr. J. Lentaigne	2	2	0	Dr. J. Andrews	1	0	0
Miss M. Brennan	1	1	0	Mr. D. McEniry	0	10	6
Mr. M. Strahan	1	0	0	Dr. C. R. Ball	2	2	0
Mr. J. R. Burton	2	2	0	Dr. J. J. Cranny	2	2	0

Honorary treasurers: Sir Charles A. Cameron, C.B., 51, Pembroke-road, Dublin; and Mr. L. H. Ormsby, Vice-President of the Royal College of Surgeons in Ireland, 92, Merrion-square, Dublin. Honorary Secretary: Mr. George F. Blake, Royal College of Surgeons, Dublin. As the list must shortly close intending subscribers should send in their subscriptions as soon as possible.

INSTANTANEOUS PHOTOGRAPHY.

MR. EDWARD F. GRÜN, M.R.C.S. Eng., has recently succeeded by means of a special lens of his own invention in taking photographs of stage performances from the auditorium by ordinary stage illumination. The lens is said to be 50 times faster than any yet made. He has sent to us a specimen print of a scene from *Floradora*.

"THE CASE OF MR. LOUIS FERDINAND DODS: AN APPEAL."

To the Editors of THE LANCET.

SIRS,—On behalf of Mr. Dods I beg to thank you for inserting his appeal in THE LANCET of April 20th, p. 1161, and for your most excellent annotation, p. 1153. At the request of Mr. Walsham, the honorary treasurer of the fund, I now beg to send you a first list of contributors. Contributions may be forwarded to Mr. W. J. Walsham, 77, Harley-street, W. Cheques to be crossed London Joint Stock Bank Limited. I am, Sirs, yours faithfully,

London, April 24th, 1901. JOSEPH E. S. KING.

	£	s.	d.		£	s.	d.
Sir Thomas Barlow ...	5	5	0	Mr. Percy G. Lodge ...	2	2	0
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H. J. H.—The organisation of the hospital fits it to be a training school for nursing probationers, but the number of beds is small. Our correspondent will find the subject thoroughly dealt with in Sir Henry Burdett's book, "The Nursing Profession; How and Where to Train."

India Rubber (Manchester).—If our correspondent will consult his usual medical attendant he will be able to procure all the information he needs about the watering-place in question.

A. M. S.—We do not give medical advice.

During the week marked copies of the following newspapers have been received:—*Manchester Courier, Birmingham Post, Surrey Times, Scotsman, Eastern Daily Press, Londonderry Sentinel, Gloucester Journal, Halifax Courier, Western Times (Exeter), Newcastle Chronicle, Norwich Eastern News, Herts Advertiser, Dundee Advertiser, South Wales Echo, Manchester Guardian, Glasgow Herald, Western News (Plymouth), Baptist, Court News, Gravesend Standard, Lancaster Guardian, Bridge of Allan Gazette, Notts Post, Grimsby Gazette, Weekly Free Press and Aberdeen Herald, Wolverhampton Weekly News, Callander Advertiser, North Star (Darlington), Kentish Observer, Daily Chronicle, Times of India, Pioneer Mail, Citizen, Builder, Architect, Reading Mercury, Local Government Chronicle, City Press, Hertfordshire Mercury, Mining*

Journal, Sligo Independent, Local Government Journal, Surrey Advertiser and Standard, Weekly News Budget, Royal Cornwall Gazette, Hong-Kong Telegraph, Clifton Chronicle, South African News, Manchester Chronicle, Windsor Chronicle, Malvern Gazette, Weekly Times, Essex Newsman, Worksop Guardian, People's Journal (Forfar), Doncaster Chronicle, Bury Free Press, &c., &c.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 25th, 1901.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. in Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
April 19	30·20	SSW	...	107	66	43	45	53	Hazy
,, 20	30·02	E.	...	112	69	47	49	57	Fine
,, 21	29·97	S.E.	...	112	73	48	52	62	Fine
,, 22	29·82	S.E.	...	118	75	55	53	63	Fine
,, 23	29·86	SSE	...	117	78	53	53	61	Hazy
,, 24	29·98	ENE	...	112	71	53	53	61	Fine
,, 25	29·90	ENE	...	114	66	51	51	56	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (29th)—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (30th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

WEDNESDAY (1st).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

THURSDAY (2nd).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

FRIDAY (3rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

SATURDAY (4th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY (1st).—OBSTETRICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8 P.M. Specimens will be shown by Dr. Jardine, Dr. M. Kerr, Dr. Jennings, and others. Adjourned Discussion on Dr. E. W. Hey Groves's paper on the Pathology and Treatment of Puerperal Eclampsia, with special reference to the Use of Saline Transfusion.

THURSDAY (2nd).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne-street, Edgware-road, W.).—Mr. W. H. Dolamore: The Importance of the Deciduous Teeth as a Factor in the Health of the Child.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Cases and Specimens will be shown by Mr. Nettleship (for Dr. Wood), Mr. G. W. Roll, Mr. S. Snell, Dr. R. D. Batten, Mr. G. Hartridge, Mr. A. S. Percival, Mr. W. Lang, and Mr. C. Blair. 8.30 P.M. Meeting.

NORTH-EAST LONDON CLINICAL SOCIETY (Tottenham Hospital).—4 P.M. Discussion on Some Complications of Pregnancy and the Puerperium (opened by Dr. A. Giles).

FRIDAY (3rd).—WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith-road, W.).—8.30 P.M. Papers:—Dr. W. Hunter: The Infective Nature and Septic Origin of Pernicious Anæmia.—Dr. S. Melville: Epidemic Stomatitis.—Dr. C. Buttar: Thrush of the Lung.

LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—5 P.M. Cases and Specimens will be shown by Dr. B. Baron, Dr. Tilley, and Mr. Waggett.

WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary, Greenwich-road, S.E.).—8.45 P.M. Presidential Address:—Dr. S. Sunderland: Uterine Hæmorrhage. To be followed by a Smoking Concert.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND (Physiological Theatre, University College, London).—4 P.M. Exhibition of Specimens by Dr. R. F. Rowlands, Prof. A. Thomson, Dr. R. Johnson, Dr. T. W. P. Lawrence, and Prof. F. Dixon. Papers:—Prof. Symington: (1) Additional Notes on the Articulations between the Occipital Bone, Atlas, and Axis in the Mammalia; (2) On the Development of Digits in Cetacea; (3) Observations on the Development of the Human Brain before and after Birth.—Dr. H. B. Shaw: A Contribution to the Study of the Morphology of Adipose Tissue.—Mr. J. H. Watson: A lantern demonstration showing the Origin and Nature of the Hydatiform Bodies of the Testicle and Broad Ligament, with special reference to the fate of the Mullerian Duct in the Epididymis.—Prof. A. Thomson: Relation of Structure to Function, as Illustrated by the Growth of the Inferior Femoral Epiphysis.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (29th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. M. Morris: Consultation. (Skin.)

TUESDAY (30th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. T. Williams: Consultation. (Medical.)

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Dr. A. Macfadyen: Cellular Physiology, with Special Reference to the Enzymes and Ferments.

WEDNESDAY (1st).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Conversazione.

THURSDAY (2nd).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Consultation. (Surgical.)

FRIDAY (3rd).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. R. Lake: Consultation. (Ear.)

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Dr. C. Mercier: Memory.

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It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

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